THE USES OF BRITISH PLANTS

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TRACED FROM ANTIQUITY TO THE PRESENT DAY

TOGETHER WITH THE DERIVATIONS OF THEIR NAMES

BY THE

REV. PROF. G. HENSLOW, M.A., F.L.S., &c.

AUTHOR OF

"THE MAKING OF FLOWERS"; "POISONOUS PLANTS OF FIELD AND GARDEN"; "BOTANY FOR BEGINNERS"; "FLORAL DISSECTIONS"; "THE ORIGIN OF FLORAL STRUCTURES"; "THE ORIGIN OF PLANT STRUCTURES"; &c.

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PREFACE

BESIDES describing their uses, I have added the supposed or real etymologies of the names, both Latin and English, of every plant mentioned. Many have been handed down from antiquity, though often transferred from one plant to another, or sometimes to more than one in subsequent centuries.

The following are the chief of the ancient authorities:

Theophrastus, a philosopher of the fourth century B.C., wrote "The History of Plants."

Cato wrote a work, "De Re Rustica," in the third century B.C.

Virgil lived in the first century B.C. Varro also wrote a work, "De Re Rustica," in the first century B.C. Dioscorides, of the first century A.D., wrote a "Herbal." Pliny, also of the first century, wrote his work on "Natural History" in thirty-seven books. He lost his life at the eruption of Vesuvius, 79 A.D.

Passing from antiquity to the Middle Ages, we find almost all plants were supposed then to have medical virtues; and the "Law of Signatures" was long believed in. Thus, *e.g.*, *because* the juice of Barberry and of Celandine is yellow, *therefore* it must be good for jaundice.

In the sixteenth century there was a great revival

of learning. Numerous Herbals were published, both in England and on the continent. The last writer of that century, was J. Gerarde, 1597.

Comparatively few of the wild flowers of the British Isles used as drugs, even down into the nineteenth century, are now employed; but the cultivation and harvesting of drugs * was an important domestic procedure. We still use the expression "cut and dried," as indicating something satisfactorily accomplished.

In the eighteenth century we find Linné (known best as Linnæus) placing botany on a more scientific basis than was possible before. He is the author of most of the modern Latin names; but he has frequently adopted the ancient ones. When an old name is used for the *species*, it is always spelled with a capital initial letter.

The majority of British *species* have no English names; those which possess them were often named because of their uses in some way.

In conclusion I wish to express my indebtedness to Mr. Randal H. Alcock's "Botanical [Latin] Names for English Readers," as well as to Dr. R. C. A. Prior's "Popular Names [English] of British Plants."

Quotations from Pliny's "Natural History" are from Bohn's Edition, translated by Dr. J. Bostock and Mr. H. T. Riley (1855).

* From the Dutch *droog*, dry; while the pl. *droogen*, lit. "dried roots." was used in the special sense of "drugs." (Skeat.)

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THE BUTTER-CUP FAMILY.

(*RANUNCULACEÆ.*)

TRAVELLER'S JOY (Cle'matis, *Diosc.*,* Vital'ba, *D.*† Fig. 1).—The name "Traveilor's ioy" was given by Gerarde, 1597, its original name being *Viorna*, *i.e.*, "adorning the waies." *Cle'matis* is from Grk. *Cle'ma*, "a shoot of the vine; and *Vital'ba* means "white vine."

Pliny says it was used for cleansing leprous sores; no doubt because of the caustic nature of the juice. This is still used occasionally by tramps to blister their arms with the hope of exciting the pity of the generous; but young shoots are sometimes pickled in vinegar. Rough kinds of baskets are made of the flexible stems in some counties.

MEADOW-RUE (Thalic'trum, *Diosc.*, fla'vum, Fig. 2), from Grk. *thalos*, a shoot.—The English name refers to its rue-like leaves. Pliny says "the leaves applied with honey heal ulcers." The roots have been used to dye wool of a yellow colour. In Bucks the people used to boil the tops in ale, for an aperient.

* Diosc., means that Dioscorides first used the name. L. means that the name was given by Linnæus.

† *I.e.*, Dodonæus.

ANEMONE, *Diosc.*, The "Wood" and "Pasque-flower" (*Anemo'ne nemoro'sa*, Fig. 3), and *A. Pulsatil'la*, *L.*, (Fig. 4).—The name means "wind-flower," but why it is so called is doubtful. "Pasque" signifies its blossoming at Easter.

All the species are acrid. Gerarde describes some half-dozen uses, which Culpeper (whose astrological Herbal is still published !) copies nearly verbatim ; but they are worthless. At present the Pasque-flower or "Pulsatilla" is a drug used by the Homœopathists.

BUTTER-CUP (Batrach'ion, *Diosc.*, Ranun'culus, Plin.*).—A name derived from "button-cop," meaning a "head" in the fourteenth century. The double form of the Field Buttercup (*R. a'cris*, Fig. 5), was called "Bachelors' buttons," and *Bouton d'or* in French. The Greek and Latin names mean "little frog," as they grow in moist places and blossom when young frogs are about.

All the species but the Water Crowfoot are acrid, especially the green fruits, and as Pliny says "raise blisters like those caused by fire ; hence the plant is used for the removal of leprous spots. They form an ingredient in all caustic preparations."

One of the most virulent is the "Celery-leaved" (*R. sceleratus*, Fig. 6), probably a corruption from the Latin, which means "criminal" from *scelus*, a "crime."—Dioscorides refers to it as a native of *Sardinia*, hence it was called *Sardonicus ;* and as the taste causes a "wry mouth," as if one was sneezing, this is the origin of a "sardonic grin." Though the juice is very acrid, this species has been eaten when boiled, in Wallachia. Indeed, the poison is easily

* For Pliny.

1. Clematis Vitalba.

3. Anemone nemorosa.

2. Thalictrum flavum.

4. Anemone Pulsatilla.

dissipated from all butter-cups by drying; as cows will not eat them when growing, but in hay they are quite edible and harmless. The Water Crowfoot (*R. aqua'tilis*, Fig. 7) growing in rivers is the only one known to be innocuous. Cattle were largely fed upon it by the Avon, cows devouring it freshly taken from the river, with great avidity.

Spear-wort (R., Flam'mula, *L.*, Fig. 8).—Both the English and Latin names refer to the leaf; this species is also very poisonous. It was used in the fourteenth century under the name of "flame" for "cankers," probably ulcers.

Lesser Celandine or Pilewort (*R. Fica'ria*, Fig. 9).—The Latin name is in allusion to the supposed cure of a complaint called *ficus* (*i.e.*, a fig); Celandine is the English name from its blossoming when the swallow (Grk. *cheli'don*) arrives.*

This plant is somewhat less acrid than the other species, so that the leaves have consequently been used as a pot-herb; but the roots are acrid and bitter; the alternative name suggests its former use from the law of signatures. Wood pigeons are said to eat them with avidity.

Marsh Marigold (Cal'tha, *Plin.*, palus'tris, Fig. 10).—The name, compounded of "Mary" (*i.e.*, the V.M.) and "gold" from its colour was applied to the garden marigold (*Calen'dula*), "marsh" being added for our semi-aquatic plant. Both the English and Latin names were used in the sixteenth century. The word *Cal'tha* (from *cal'athus*, a cup) originated with Pliny, but he meant the garden marigold.

Like all the preceding it is a very acrid, poisonous

* See below, under Celandine ("Poppy" Family, p. 13).

5. Ranunculus acris.

7. Ranunculus aquatilis.

6. Ranunculus sceleratus.

8. Ranunculus Flammula

plant. Several persons have suffered by eating it in dire poverty. The buds have been salted and pickled like capers. A yellow dye has been extracted from the petals.

Globe Flower (Trol'lius europæ'us, *L.*, Fig. 11).—Both English and Latin names are from the sixteenth century. *Troll* is a Swedish term for a bad spirit; and was applied to this plant because of its poisonous nature. The flowers are great favourites with the Swedes, who use them for decorations on holidays; as do the inhabitants of Scotland and Westmoreland.

A medicinal use was formerly made of a decoction as a cure for scrofula.

Hellebore (Helleb'orus, *Diosc.*)—The origin of the name is unknown, Like all other plants of the family, the two British species of Hellebore (*H. vir'idis*, Fig. 12, and *fœ'tidus*, Fig. 13) are dangerous, but are often used by country people as vermifuges; indeed, they have been so employed since the days of Hippocrates, fourth century, B.C. Our British Pharmacopœia contained them in 1851, but they have now been discarded as too dangerous.

Columbine (Aquile'gia vulga'ris, Fig. 14).—Is so called from the resemblance of the flower to five birds (*colum'ba*, a pigeon): *Aquile'gia* is from *aq'uila*, an eagle, the claws of which were thought to be represented by the spurs of the corolla.

In the fourteenth century it was regarded as a remedy for the quinsy. Later, a tincture was used to strengthen the gums; but children have died from an overdose given internally.

Aconite, Monkshood, or Wolfsbane (Aconi'tum, *Diosc.*, Napel'lus, Fig. 15).—The first name is

9. Ranunculus Ficaria.

11. Trollius europæus.

10. Caltha palustris.

12. Helleborus viridis.

said to be derived from the Greek, *en akonais*, *i.e.*, growing on steep, sharp rocks (Ovid).* Monkshood is from the upper hood-like sepal, and Wolfsbane because, says Gerarde, "the hunters which seeke after woolfes put the juice thereof into rawe flesh, which the woolfes devoure and are killed." Another species is *A. lycoc'tonum, i.e.*, "Wolf-slayer." *Napel'lus* means "little turnip," in reference to the root.

Pliny says the panther is hunted in the same way, and, as the poison causes a contraction of the throat it was called *pardalian'ches* (*i.e.*, Leopard-strangler). Pliny further adds a rather curious idea: "Such is the nature of this deadly plant that it kills man unless it can find in him something else to kill. When such is the case, as though it had discovered in the body a fit rival to contend with, that substance is the sole object of its attack."

This is the only British plant of this family now included in the Pharmacopœia. It is a most deadly poisonous plant in all its parts. The root has often been dug up and eaten in mistake for Horse-radish with fatal results; but while the root of the Aconite is *conical*, and *brown* or *black*, that of the Horse-radish is *cylindrical* and *pale* in colour.†

* I would suggest another not mentioned. *Ak'one* is Grk. for a whetstone: and Pindar uses the expression: "I have the feeling *of a whetstone* on my tongue," *i.e.*, I am sharpened or roused to song (Lid. and Scot. Lex.): "Placed in contact with the tongue, any portion of the plant excites a painful feeling of smarting." (Hogg, "Vegetable Kingdom.")

† For further details of poisonous plants I must refer the reader to my "Poisonous Plants of Field and Garden" (S.P.C.R.).

13. Helleborus fœtidus.

14. Aquilegia vulgaris.

15. Aconitum Napellus.

16. Berberis vulgaris.

THE BARBERRY FAMILY.

(*BERBERIDEÆ.*)

Barberry, or Pipperidge (Ber′beris, *L.*, vulga′ris, Fig. 16).—The name appears to be derived from the Arabic word *Amyberber′is* in the fifteenth century. The second name is from the Fr. *pepin*, a pip, and *rouge*, red.

Pliny called the tree *Appendix*, because of the red berries hanging from the branchlets. They were eaten raw, dried, or boiled in wine for stomachic troubles.

The scarlet berries contain malic acid, which has been manufactured from them in France. They are often made into a pleasant sub-acid conserve or jelly. The bark contains tannin, and has been used for preparing leather in Poland.

Both the stem and root are yellow internally, and furnish a good dye for morocco leather, linen, and cotton.

According to the old idea of signatures the yellow juice was supposed to be a cure for jaundice.

THE POPPY FAMILY.

(*PAPAVERACEÆ.*)

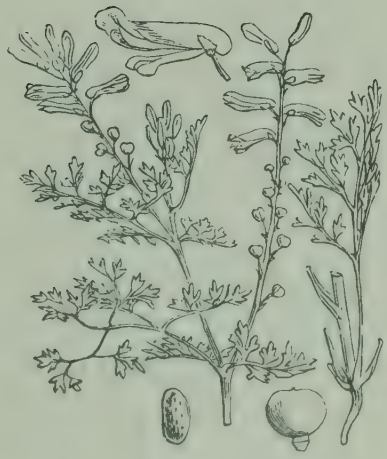
Poppy (Papa′ver, *Plin.*), Ang.-Sax. *popig*, from the Latin, the etymology of which is unknown.

Field Poppy (P. Rhœ′as, Fig. 17).—*Rhœ′as* was a name given to the common scarlet poppy by the Herbalist Lobel (in the sixteenth century). It is a Greek word from *rheo*, "to flow," and signifies "falling off," probably an allusion to the "fugaceous"

17. Papaver Rhœas.

19. Chelidonium maius.

18. Papaver somniferum.



20. Fumaria officinalis.

petals. The heads were formerly steeped in wine, and so induced sleep. Only the petals are now used in pharmacy as a colouring-matter.

Opium Poppy (P. somnif'erum, Fig. 18).—Long cultivated and naturalised in England. One of the earliest references to this poppy (derived from the wild *P. seg'etum* of S. European cornfields, &c.) is to Tarquinius superbus, who indicated to his son Sextus, by the envoys he sent to his father, as to how he should take the town of Gabii. His father cut off the flowers of the tallest poppies in the garden, as a hint!

Pliny tells us the juice coagulated from the cut half-ripe pods, was received on wool and scraped off, then kneaded into lozenges and dried. Many suicides were the result of taking opium among the Romans. In the Middle Ages it was used with henbane, &c., as an anæsthetic during surgical operations. One receipt of the fourteenth century contained the juices of hemlock, bryony, lettuce, poppy, and henbane, mixed with vinegar. Of this, "3 spoonfulls in a potell of good wine or ale" were given to the patient. It seems to have been discontinued about the fifteenth century, probably from being too dangerous. In ancient days the Mandrake was used for the same purpose, and as Juliet's potion appears to have been that, it probably took the place of the above mixed drug, when it could be easily imported from S. Europe.

The dried poppy-heads are used as an emollient and as an anodyne application. The seeds, however, contain *no* opium, only a harmless oil, which is sometimes used instead of olive oil. The crushed seeds then make an excellent oil-cake for cattle.

The seeds are sometimes baked as cakes, or strewn upon bread and butter in some parts of Europe. In S. Italy the seeds are eaten encrusted with sugar. Under the name of maw-seed, they are given to birds when moulting.

CELANDINE (Chelid'onium, *Diosc.*, ma'jus, Fig. 19).—The Latin and English name means a "Swallow" in Greek. Pliny says: "It is by the aid of this plant that the swallow restores the sight of the young birds in the nest, even when the eyes have been plucked out!" This is copied from Aristotle.

The plant has a yellow poisonous juice, and is often found wild in the hedges near villages; it was a drug plant in the Middle Ages; and by the rule of signatures was supposed to be intended as a remedy for the jaundice.

In the fourteenth century a drink was made with celandine, mugwort, &c., supposed to be good for extravasated blood. It was also an ingredient in a plaster for a sore head or sore eyes. It is not used now.

FUMITORY FAMILY.

(*FUMARIACEÆ.*)

FUMITORY (Fuma'ria officina'lis, Fig. 20).—The name is from *fu'mus*, smoke, and is derived from *fu'mus ter'ræ*, "earth-smoke," as it was called in the fourteenth century; when it formed an ingredient of a recipe for destroying "evil blood" and the "morphew," a leprous eruption. It has no real virtue.

THE CABBAGE FAMILY.
(*CRUCIFERÆ.*)

Brompton and Queen Stocks (Matthi'ola inca'na, Fig. 21).—Named after Matthioli, an Italian physician. The plant has only been found on the cliffs near Hastings and on the Isle of Wight. Like our second species, *M. sinua'ta* (Fig. 22), it is a Mediterranean plant; and as it occurs on old walls, it may have been introduced in the Middle Ages. It is the origin of the above garden plants.

Wallflower (Cheiran'thus Chei'ri, Fig. 23).—The English name is from its habit of growing naturalised on old monastery and other walls, having been introduced in the Middle Ages from Central Europe. *Cheiri* or *Keirin* is an Arabic name of this plant, which Linnæus adopted, and added the termination *an'thos* a "flower." Now *cheiros* in Greek is the hand; so it came to mean "hand-flower."

The plant was called *Violaria* in the fourteenth century, and the flowers being known as *viola* and "walfair." Gerarde in 1597 called it "wall-gilloflower," the latter term having been transferred from carnations and pinks.

Under cultivation double as well as single forms of various shades of yellow and red have been produced.

Watercress (Nastur'tium, *Plin.*, officinale, Fig. 24).—The Latin name is said to be derived from *nasus*, the nose, and *tortus*, twisted, from the pungent sensation. It was familiar to the ancient Greeks as *Kar'damon*, being used as a

21. Matthiola incana.

23. Cheiranthus Cheiri.

22. Matthiola sinuata.

24. Nasturtium officinale.

salad, and for its medicinal virtues; as it was also in the fourteenth century, then, known as *N. aquat'icum.* In Pliny's time it was regarded as efficacious for brain disorders, as insanity, the Greek name meaning "Head-subduer." It was first cultivated in England in 1801. Its nutritive value depends upon the aromatic oil and mineral ingredients, in which it exceeds all other salad plants.

WINTERCRESS (Barbare'a vul'garis, Fig. 25, and B. præ'cox).—Formerly called Herb St. Barbara, hence the Latin name. It was cultivated as a salad plant. It is eaten boiled in Sweden.

LADY'S SMOCK, CUCKOO-FLOWER (Cardami'ne, *Dios.*, praten'sis, Fig. 26).—The Latin name means "Subduing the heart," from its supposed virtues. The English names are from ladies' dresses, and the time when the cuckoo appears. The leaves are sometimes used for salads, being rather pungent but bitter. It had a reputation, like other Crucifers, for being anti-scorbutic.

HAIRY BITTERCRESS (C. hirsu'ta, Fig. 27).—Is a common annual, now cultivated as a salad plant.

FLIX-WEED (Sisym'brium, *Theoph.*,* Soph'ia, *Do.*, Fig. 28).—The Greek name *Sisym'brion* was also given to the Water-mint. *Soph'ia* † means "Wisdom," as the plant had a great repute, and was fancifully called "The Wisdom of the Surgeons." Flix means "flux," which implies its former use, the seeds being a drug for dysentery; they probably have no real value.

HEDGE GARLIC (Sisym'brium, *Theoph.*, Allia'ria, Fig. 29).—Is readily known by its garlic-like odour, hence the specific name from *Allium*. It was

* *I.e.*, Theophrastus. † Wrongly pronounced Sophi'a as a *name*.

25. Barbarea vulgaris.

26. Cardamine pratensis.

27. Cardamine hirsuta.

28. Sisymbrium Sophia.

formerly used as a green vegetable under the names "Jack-by-the-hedge" or "Sauce-alone," and was boiled with meat. In Wales it is fried with bacon and herrings.

TREACLE MUSTARD (Erys'imum, *Theoph.*, cheiranthoi'des,* Fig. 30).—The Latin is from Grk. *eruo*, to "draw" blisters. It is called "Treacle" from the word *theriakel*, a diminutive of *therion*, a "little beast," because it is an ingredient, as well as vipers, &c. (*see* "Mithridate Mustard," p. 23), of Venice treacle, or "Viper-wine." It was a celebrated vermifuge.

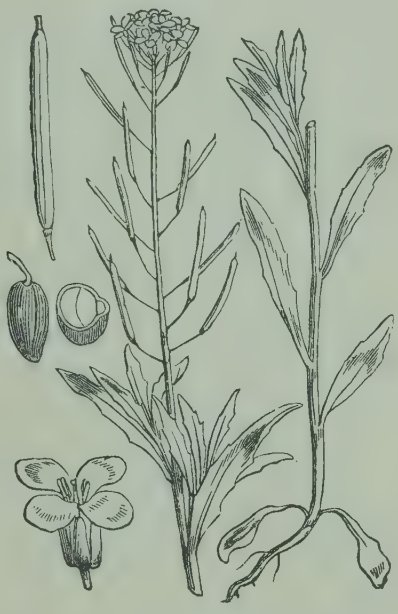
CABBAGE, CAULIFLOWER, COLE, &c. (Bras'sica, *Plin.*, olera'cea, Fig. 31).—The origin of the word "cabbage" is from the Fr. *Choux cabus, i.e.*, "round-headed" *choux*, from the Italian *capuccio*, a "little head"; a dim. of *capo*, Lat. *caput*. The "*choux*," the real name of the plant, has thus dropped out.

Cole or Kole is from Lat. *cau'lis*, a stem, "wort" being old English for any plant.

It is found wild on our chalk cliffs. The cultivated forms are innumerable, though there are none wild. There are four types, viz., Greens or "hearting Cabbage," Kales with loose foliage, Cauliflower, and Broccoli, which have a hypertrophied inflorescence, and Kohl-Rabi with a Turnip-formed stem. It was well known to the ancients both as a vegetable and for its numerous supposed medicinal virtues. It was also pickled with vinegar. The "sprouts," probably flowering shoots, were also eaten. Gerarde figures a Cauliflower, but a very poor specimen apparently in his day (1597). Having been brought from the Mediterranean regions, where

* Words ending in *oides* signify "like."

29. Sisymbrium Alliaria.



30. Erysimum cheiranthoides.

31. Brassica oleracea.

32. Brassica campestris.

plants are sown in September and are perfected in spring, the Broccoli still follows this rule, whereas the Cauliflower pursues its course according to our climate, and matures later.

Cato speaks highly of the Cabbage, both cooked or pickled. Pliny, too, regards it as the most esteemed of all vegetables. As for its medicinal virtues he accords to it eighty-seven remedies.

In Cato's time there were only three varieties: one, with open leaves, *i.e.*, our Coles or Kales; a second, with crested leaves, our "Curled Kales"; and a third variety, with a smooth tender leaf. Cabbage "shoots" were known, probably shooting broccoli, still used in Malta.

One form Pliny describes as the Arcinian; "beneath nearly all the leaves there are small shoots thrown out, peculiar to it." Gerarde figures it, but Parkinson suppressed the figure in his work. The small leafy excrescences sometimes take the form of funnels.

Pickled Cabbage, or rather a sort of Sourcrout, was made in the first century.

Rape, Colza, English and Swede Turnips (forms of Bras'sica, *Plin.*, campes'tris, proper, Fig. 32); Turnip and Navew (Sub. sp. Ra'pa).—Rape and Colza (from the Flemish word *Kool-zaad*, hence "Cole-seed," are grown for their oil in the seed, though often also as fodder plants. The oil-cake made from expressed seeds is used both as food and manure. Pliny speaks of turning the Rape into the Turnip (which he regards as a variety) by sowing the seed in a "cloggy" soil. A similar result occurs with Radishes and Carrots, in that long-rooted forms occur in a loose, but short ones in a stiff soil.

33. Brassica nigra.

35. Cochlearia officinalis.

34. Brassica alba.

36. Lepidium latifolium.

The Turnip was known to the Greeks as gon'gulos, "round," and seems to have been grown more for its supposed medicinal virtues than for food, though Manlius Curius was discovered by the Samnites, who tried to bribe him, cooking turnips over his watch fire. He said he esteemed them more highly than their gold. It was cultivated through the Middle Ages, and probably introduced into England by the monks. It was much grown in fields in the sixteenth century; but the best, Gerarde says, were cultivated at Hackney in a sandy soil, and brought by women for sale at Cheapside. In the seventeenth century they were grown for cattle. The Turnip has no real amount of nourishment, 93 per cent. being water, and more than that when boiled.

Mustard (black, Bras'sica ni'gra, Fig. 33; white, B. alba, Fig. 34).—The origin of the name appears to be from Sp. *Mastuerza* from Lat. *nastur'tium* (*see* Watercress, p. 13.) Of these two kinds, the former, with dark-coloured seeds, grows in hedges round our coasts, being often 4 or even 5 feet in height, as in Cornwall, with stems three-quarters of an inch thick. This is the Mustard of the Scriptures. It is said to grow taller than a man on horseback in Palestine. The white is a field weed having yellow-coated seeds. When ground up to powder and mixed with water the strong pungent flavour is evolved, so that the oil-cake can only be used as manure. It is much cultivated about Wisbech for "Colman's Mustard."

Scurvy Grass (Cochlea'ria officina'lis, Fig. 35) is a common plant round the coasts. The leaves are somewhat fleshy and the flowers white. The pod is nearly globular. It abounds in a pungent oil, to

which anti-scorbutic properties are attributed; it would form an agreeable salad. It was used in the sixteenth century as a supposed remedy for ague.

Horse-radish (C. Armora'cia, *L.*) is probably an escape and not a true British plant. It was not in general use before Gerarde's time (1597), who says: Horse-radish stamped, with a little vinegar thereto is commonly used among the Germans for sauce to eat fish with and such like meats as we do mustard." It appears to be alluded to by Pliny as *Armora'cia*, hence its present specific name.

Gold of Pleasure (Cameli'na sati'va), from Grk. *chamai*, on the ground, and *linon*, flax, was probably introduced with linseed.—It is cultivated abroad for the sake of the oil in the seeds, which is used for various domestic purposes. When the railway cutting was made in 1859 at Steyning, in Sussex, this plant suddenly appeared on the sides in great quantity; but it disappeared again a few years afterwards.

Pepper-wort (Lepid'ium latifo'lium, Fig. 36), also called "Dittander," a corruption from *Dictam'nus*, a different plant, is found in salt marshes. It was formerly used as a condiment, in consequence of its pungent qualities, and cultivated in cottage gardens. It is an ally of the Garden Cress (*L. sati'vum*), a native of the East.

Mithridate Mustard, Penny Cress (Thlas'pi, *Diosc.*, arven'se, Fig. 37), name from Grk. *thlao*, to crush or flatten, in allusion to the flat pods, like pennies.—The English name is that of the King of Pontus, Mithridates, who invented an antidote for poisons having seventy-two ingredients, including vipers and other obnoxious reptiles; hence, it was

called *Theriaca*, from *therion*, a "small beast." (*See* TREACLE MUSTARD, p. 18.)

CANDY-TUFT (Ibe'ris; *Diosc.*, ama'ra, Fig. 38).—It is a native of *Iberia* in Spain, hence the name. The English word refers to the "tuft" of flowers, being from Candia in Crete. It is wild near Hitchin, and has been long cultivated as a garden plant, with a much improved form of flower, with white or crimson petals.

WOAD (Isa'tis tincto'ria, Fig. 39).—This grows to about 3 feet in height and bears yellow flowers and small flat pods which do not open. Cæsar says he found the natives stained with *vitrum*, from which the word "Woad" is derived; but by Pliny, in the first century, it was called *glas'tum* (hence Glastonbury). *Glas*, in Celtic, means blue or grey, but the older name of that town was "ynys vytryn," meaning "Paint island"; hence there is some obscurity as to the meaning and interchanging of these words. How the ancients prepared the blue dye is not known, but Dr. Plowright, of Lynn, states that Woad leaves, when covered with boiling water and weighted down for half an hour, and the water poured off, treated with caustic potash, and subsequently with hydrochloric acid, yields a good indigo blue. If the time of infusion be increased, greens and browns are obtained. Woad mills are still worked at Wisbech, but not for the dye. The produce *fixes* true indigo.

SEAKALE (Cram'be, *Hipp.*, marit'ima, Fig. 40).—This is common on our sea shores, and the people in the West of England have been accustomed to cut the young shoots and eat them boiled like Asparagus. The cultivated form is the same, only

37. Thlaspi arvense.

38. Iberis amara.

39. Isatis tinctoria.

40. Crambe maritima.

larger. It has long been used by the old herbalists as *Bras'sica mari'na* or Sea Colewort.

Radish (Raph'anus, *Theoph.*, Raphanis'trum, var. marit'imus, Fig. 41).—The Garden Radish has been derived from this wild Radish. It is very ancient. Herodotus tells us that Radishes formed part payment of the builders of the Great Pyramid. M. Carrière, who obtained good roots from the wild plant, found (as Pliny records with Rape) that long roots are produced by sowing the seed in a loose soil and short or Turnip-rooted kinds in a stiff soil. The same results occur with Carrots.

THE MIGNONETTE FAMILY.

(*RESEDACEÆ.*)

Weld or Dyer's Weed (Rese'da, *Plin.*, Lut'eola, *Ray*, Fig. 42).—From *resedo*, to calm, on account of supposed sedative properties. *Lut'eola* means yellow. Weld is from the Sp. *qualda*. It is common in waste places, growing from 2 feet to 3 feet high, with a spike of greenish yellow flowers. It has long been employed as a yellow and green dye-plant for colouring cotton and woollen fabrics. The water-colour called "Dutch pink" is also made from this plant. It has been preferred to other dyes for giving a lively green lemon-yellow to silk and for paper staining.

THE VIOLET FAMILY.

(*VIOLACEÆ.*)

Violet (Vi'ola, *Plin.*, odora'ta, Fig. 43).—In Pliny's days Violets were worn as chaplets, as they were supposed to dispel the fumes of wine and

41. Raphanus Raphanistrum.

42. Reseda Luteola.

43. Viola odorata.

44. Viola tricolor.

headache. Besides their value for their perfume, the petals of the Violet are used in a medicinal syrup for children, though the numerous virtues attributed to the Violet by the mediæval doctors were imaginary. Thus, "stamped with water, it casts out a broken bone." The underground stem is, however, strongly emetic, and resembles ipecacuanha, being employed to adulterate this drug. It is said that the syrup forms a principal ingredient in the oriental sherbet, and that it is eulogised in the Koran, which states that it possesses the same degree of superiority over other flowers that the prophet had above men. The flowers are dried and candied for bon-bons. Double as well as single forms are cultivated.

Heartsease (Vi′ola tric′olor, Fig. 44) is of no medicinal value, but was supposed to be a good cordial, hence the present name. Turner (sixteenth century) says: "It is cold and moist under the mild influence of Venus." Culpeper (seventeenth century) declares: "The herb is Saturnine, being cold, viscous, and slimy." So doctors disagreed then just as they sometimes do now!

THE MILKWORT FAMILY.

(*POLYGALACEÆ.*)

Milkwort (Polyg′ala, *Diosc.*, vulga′ris, Fig. 45).—From Grk. *polu-gala*, much milk, from its supposed virtue of increasing its secretion. The bitter infusion the herb has been used for catarrhous coughs, and the powdered root for pleurisy; but it is not now employed. *P. Sen′ega*, from America, is the only species in our Pharmacopœia, being used as a stimulating expectorant.

45. Polygala vulgaris.

46. Dianthus cæsius.

47. Saponaria officinalis.

48. Silene Cucubalus.

THE PINK FAMILY.

(*CARYOPHYLLEÆ.*)

Pinks and Carnations (Dian'thus, *L.*), from *Dios* and *anthos*, Flower of Jove.—Two naturalised species, doubtless long introduced from the Continent, are the sources of these garden favourites, viz., Pink (*D. pluma'rius*) and Carnation (*D. Caryophyl'lus*). This word was originally "Coronation," the flowers being used as chaplets. "Pink" is short for pinkstein, *i.e.*, Pentecoste, or Whitsuntide, when it flowers. The enormous size now attained was foreshadowed in Gerarde's day (1597); for he figured "the great double Carnation" 3 inches in diameter. It was called the Clove Gilloflower, from its scent, and used as a spice for ale and wine; hence it was also called "Sops-in-Wine." Gerarde adds: "The conserue made of the Cloue Gilloflower and sugar is exceeding cordiall."

Cheddar Pink (D. cæ'sius, Fig. 46).—So called from its native place, the limestone rocks of Cheddar. It has been cultivated as a garden rock plant.

Soapwort (Sapona'ria, *L.*, officina'lis, Fig. 47).—From Lat., *sapo*, soap. This plant is not uncommon near villages, being sometimes double, with pink or white flowers, flowering in August. The leaves, &c., when boiled and macerated in water become saponaceous, and were formerly used as soap. It was used medicinally, but has no certain virtues.

Bladder Campion (Sile'ne, *Theoph.*, Cucu'balus. Fig. 48).—From *sialon*, *i.e.*, saliva, in allusion to the viscid glands on the Catchfly. It is a common plant

49. Cerastium vulgatum.

50. Stellaria media.

51. Arenaria peploides.

52. Spergula arvensis.

in waste places, having smooth foliage and white petals in an inflated calyx, hence its name. The young shoots are said to resemble green Peas in flavour and supply an excellent vegetable. It is recorded that, "in 1685, the crops of Minorca being nearly destroyed by locusts, this plant afforded support to many of the inhabitants."

Mouse-ear Chickweed (Ceras'tium, *L.*, Fig. 49).—This was called Murion in the fourteenth century, from *Mus*, a mouse, and Cicena-mete. *Keras* is the Grk. for a horn, the allusion being to the shape of the fruit. This plant was probably used, as well as the chickweed, under the same name.

Chickweed (Stella'ria me'dia, Fig. 50).—From Lat. *stella*, a star, from the star-like flower of the Stitchwort. It was called Chekyn-methe in the fourteenth century, as well as *Ip'pia mi'nor*. It was an ingredient in a plaster for broken bones and swellings, being supposed to be binding and cooling; but it has no real virtues. Though despised as a human food and only given to cage birds, it resembles spinach, and might well be used when vegetables are scarce, as it can generally be found all the year round.

Sea Sand-wort (Arena'ria peploi'des, Fig. 51).—From Lat. *arena*, sand, and "like the pep'lion," *Portulac'a*, the purslane. This plant is sometimes pickled like the samphire, having a similar fleshy foliage. In Iceland it used to be fermented and eaten like Sourcrout in Germany.

Spurry (Sper'gula arven'sis, Fig. 52).—Some say from Lat. *spar'go*, to scatter, the seeds being widely dispersed in cornfields; others from *Asparag'ula*, *i.e.*, little *Aspar'agus*, from the resemblance of the leaves. This has been much cultivated as a fodder

plant on the Continent. In France it is considered equal to clover. The seeds are eaten by poultry. As an oil-cake they make excellent food for cattle. Even bread has been made in times of scarcity in northern countries.

THE ST. JOHN'S-WORT FAMILY.
(*HYPERICACEÆ*).

ST. JOHN'S-WORT (Hyper'icum, *Diosc.*, perfora'tum, Fig. 53).—A common plant with opposite, entire leaves and clusters of yellow flowers. It was formerly regarded as a plant which could ward off disasters caused by evil spirits if it be gathered on the Eve of St. John's Day (Midsummer Eve). It was customary to hang it up over doors for this purpose, and it was therefore called *Fuga dæmonum* in the Middle Ages. It was also used as an astringent application to wounds, being one of the ingredients of "Save," mentioned by Chaucer as being used by the knights after being wounded. The buds will give good red and yellow dyes, and if they are steeped in oil of turpentine will furnish a red varnish.

TUTSAN (H. Androsæ'mum, *Diosc.*, Fig. 54), so called from the French "tout-sain" or "all-heal."—*Androsæ'mum* means "man's blood," from the colour of the juice. Like the preceding, it was regarded as a vulnerary from its astringent properties.

THE MALLOW FAMILY.
(*MALVACEÆ.*)

MARSH MALLOW (Althæ'a officina'lis, Fig. 56).—From Grk. *altho*, to heal, is a local plant found in

marshy meadows, &c., near the sea, having a thick root, rose-coloured flowers, and downy leaves. Its root, which abounds in mucilage, has long been used as an emollient, and forms an ingredient in "pâte de guimauve" and Pontefract lozenges. As a syrup it is excellent for bronchial affections, while decoctions of the leaves are good for fomentations. A South European species (*M. parviflo'ra*) is cultivated as a pot herb, as at Cairo.

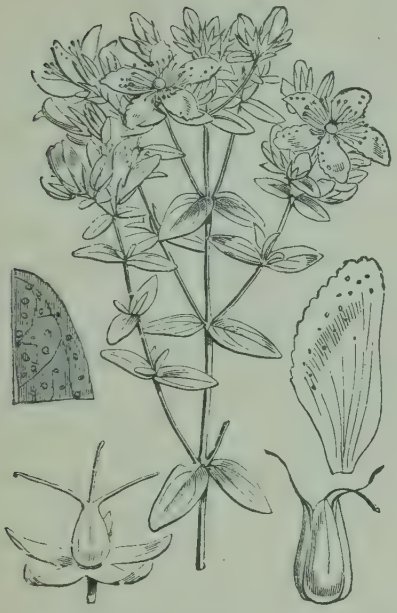
Common Mallow (Mal'va, *Plin.*, sylves'tris, Fig. 55).—From Grk. *malache*, soft; because of its emollient properties. This and other species are characterised by having much mucilage, and consequently have been used as emollients. The flat fruits called "cheeses" by country children are often eaten by them, as no species of the Malvaceæ is harmful. Several members of the family yield excellent fibres, the Musk Mallow (*M. moscha'ta*) being one of the best for the purpose.

Tree Mallow (Lavate'ra arbor'ea, Fig. 57).—From Lavater, a physician of Zurich, is found on maritime rocks, growing from 3 feet to 6 feet or more in height, and bearing purple flowers. It is often grown in gardens by the seaside.

THE LIME FAMILY.

(*TILIACEÆ.*)

Lime or Linden (Til'ia vulga'ris, Fig. 58).—Lime is from *line;* but Linden is from Swiss word *linda*, a band. Pliny says that bands were made of the fine membranous substance called by the Romans *tiliæ*, the finer sorts being *philyræ*, used like ribbons for garlands and wreaths. Revellers bound their



53. Hypericum perforatum.

54. Hypericum Androsæmum.

55. Malva sylvestris.

56. Althæa officinalis.

hair with them. Pliny records five remedies in the Lime-tree. The common Lime is not indigenous, though we have two native species. No particular use is made of the Lime-tree in England, but the inner bark, called "bast," is used for garden matting, and known as "Russian," since it is imported from Archangel. The wood of the tree was formerly used for engraving, but is now superseded by that of the Box-tree. Holbein's cuts are said to have been made of it. The flowers supply an abundance of Honey, which is secreted in rather an unusual place, namely, by the sepals, which are boat-shaped, and so hold a considerable quantity in each. It hardly ever ripens its fruit in this country. It may be remembered that the Lime-tree supplied the name Linnè, usually known as Linnæus.

THE FLAX FAMILY.

(*LINEÆ.*)

Flax (Li'num, *Theoph.*, usitatis'simum, Fig. 59). —From Grk. *Linon;* Flax is from the Grk. *flaehs;* Lat. *filare,* is to spin, and *filum,* a thread. It is an escape from cultivation only. The inner fibrous bark was used in ancient days as now. The mummy cloths of Egypt are entirely of flax. The tow was used for wicks in oil lamps by the ancients; and the seed (linseed) is used for oil. Being a "drying" oil, it is suitable for oil-painting.

Narrow-leaved Flax (L. angustifo'lium, Fig. 60). —This species appears to have been the oldest in use, for the fibre is found in the remains of the Swiss Lake dwellings of prehistoric man.

Purging Flax (L. cathar'ticum. Fig. 61).—This is

57. Lavatera arborea.

58. Tilia europæa.

59. Linum usitatissimum.

60. Linum angustifolium.

a very bitter and acrid plant; it possesses drastic principles and has been long used, boiled in ale, for rheumatism, dropsy, and other ailments.

THE CRANE'S-BILL FAMILY.

(*GERANIACEÆ.*)

Meadow Crane's-bill (Gera'nium, *Diosc.*, praten'se, Fig. 62).—From Grk. *geran*, a crane, from the beaked fruit. This occurs in moist meadows, sometimes abundantly (Derbyshire). It has long been cultivated as a garden plant.

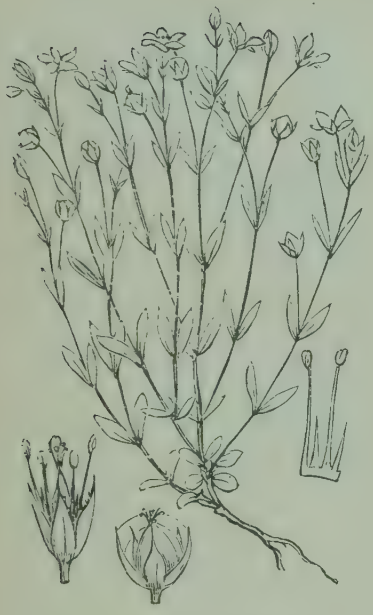
G. sanguin'eum, with crimson or pink flowers, and the naturalised *G. phæ'um*, with dusky purple, as well as *G. stria'tum*, the "pencilled" Geranium, are also grown in gardens.

Herb Robert (G. Robertia'num, Fig. 63).—This is the only one of all our eleven species which has had any supposed virtues. In the fourteenth century it was known as *Herba Robertus* and Sadroc. It was used for healing wounds.

Wood-sorrel (Ox'alis Acetosel'la, Fig. 64).—From Grk. *oxu*, sharp; and Lat. *acetosella*, from *acidus* sour; from which is *sorrel*.

In the Tribe *Oxalideæ*, both the Wood sorrel and Balsams are cultivated, Impa'tiens no'li-me-tan'gere (Fig. 65), being found in mountainous situations, as in North Wales and Westmoreland, while the American plant, *I. ful'va*, (Fig. 66), has established itself along several river-sides.

The Wood-sorrel, the trifoliate leaves of which illustrate "sleep" very well, is remarkable for the great acidity of its foliage, hence it was formerly called "Wood-sour"; this is due to binoxalate of



61. L num catharticum.

62. Geranium pratense.

63. Geranium Robertianum.

64. Oxalis Acetosella

potash. From the expressed and evaporated juice crystals are obtained and sold as "essential salt of lemons," useful for removing ink stains; but it should be remembered that it is very poisonous, so that those who use the plant for salads should do so with great caution.

THE HOLLY FAMILY.

(*ILICINEÆ.*)

Holly (I'lex Aquifo'lium, Fig. 67).—*Ilex* was Pliny's name for the Holm-oak. *Acuifolium* means sharp-pointed leaf. A.S. *holegn*, hence holly, is from Lat. *ulex*, the furze. Besides being much grown as an ornamental shrub or for hedges, in which the numerous variegated sorts play a great part, bird-lime is often prepared from the bark of the Holly, the inner green portion of which is steeped in water and allowed to ferment, when, after some days, it becomes sticky. This, with oil or fat, constitutes bird-lime. The bark has also been used instead of cinchona for fevers. Lastly, the leaves are employed in the Black Forest for Tea. This is not surprising, as Paraguay Tea is made from the dried leaves and shoots of another species of Holly growing in South America, and it often happens that similar properties are found in more than one species of the same genus. The white wood of Holly is much used for inlaying, as in the so-called "Tunbridge ware."

THE SPINDLE-TREE FAMILY.

(*CELASTRINEÆ.*)

Spindle Tree (Euo'nymus, *Theoph.*, europæ'us. Fig. 68).—Euonymé was the Mother of the Furies,

65. Impatiens Noli-me-tangere.

66. Impatiens fulva.

67. Ilex Aquifolium.

68. Euonymus europæus.

the Lat. name being in allusion to the poisonous fruit. The English name is from the use for which the shoots are employed, and being a very hard wood it is well adapted for making butchers' skewers. It also makes excellent drawing charcoal. The fruit becomes rose-coloured when ripe, and on bursting liberates the seeds, which are covered with an orange excrescence. This yields a good yellow dye, and a green one with the addition of alum. The berries, it should be remembered, are harmful, having proved fatal to sheep. The shoots are bored for pipe-stems in Germany. The tree is also called "Prickwood," being used for toothpicks.

THE BUCKTHORN FAMILY.

(*RHAMNACEÆ.*)

Buckthorn (Rham′nus, *Theoph.*, Fran′gula, Fig. 69, and R. cathar′ticus, Fig. 70).—Buck is a corruption of Box. The berries and bark have been long used as a cathartic medicine, but are rather dangerous. The chief value of the berries, as also of a foreign species (*R. infecto′rius*), is for water-colours, in yielding "sap-green" and a yellow dye, much used in Russia, as also does the bark. The wood is particularly serviceable for making gunpowder charcoal, being very light and easily inflammable.

THE MAPLE FAMILY.

(*SAPINDACEÆ;* tribe, Acerineæ.)

Sycamore or Great Maple (Acer, *Plin.*, Pseudoplat′anus, Fig. 71) is an introduced tree, being a native

69. Rhamnus Frangula.

70. Rhamnus catharticus.

71. Acer Pseudo-platanus.

72. Acer campestre.

of Middle Europe and West Asia. Like the Maple, the wood is good for turning, and when the tree has been pollarded the knotty wood is sometimes beautifully marked, and is useful as a veneer. The juice contains a large amount of sugar. It is said that thirty-six quarts of sap have flowed from one tree within a week.

Maple (A. campes'tre, Fig. 72).—*Acer* refers to the hardness of the wood ; but the origin of "Maple" is unknown. The chief value of this tree is in the timber, as the wood, being beautifully marked when polished, is employed for furniture. As it can be well turned, bowls, cups, &c., are made of it. The sap of this, as well as of other species (especially the Sugar Maple of North America), contains sugar, the leaves and young shoots forming excellent fodder. The charcoal obtained from this wood is one of the best.

THE PEA FAMILY.

(*LEGUMINOSÆ.*)

Dyers' Greenweed (Genis'ta, *Plin.*, tincto'ria, Fig. 73).—*Genista* was Pliny's name for the Broom ; its etymology is unknown. The English name was Wede-wixin or Woud-wex in the fourteenth century. It was used at that time for an ointment called *Unguentum geneste*, "goud for alle could goutes, &c." The seed was also used in a plaister for broken limbs. This is a small, shrubby plant, with narrow pointed leaves and yellow flowers. These are remarkable for "exploding" when visited by an insect. The "claws" of the four lower petals are straight at

73. Genista tinctoria.

75. Cytisus scoparius.

74. Ulex europæus

76. Medicago lupulina.

first, but in a high state of tension, so that the moment they are touched they curl downwards with a sudden action and the flower bursts open. The younger parts of the shoots and leaves yield a good yellow dye, which, with woad, supplies an excellent green colour. It is chiefly used for dying wool, alum and other substances being required to fix it. The plant has been used medicinally, but not by English physicians.

Furze or Gorse (U'lex, *Plin.*, europæ'us, Fig. 74).—Pliny refers to the use of *ulex* in collecting gold: "Trenches are dug for water to pass along with layers of *ulex* at the bottom. It is like Rosemary, but rough and prickly, and well adapted for arresting any pieces of gold that may be carried along." It may, however, be some other spiny plant to which he refers. Furze, or Firse as well as gorse in the sixteenth century, from gorst, the Juniper, is of obscure meaning; perhaps it is the same as *fir*, as firse-like; branches of coniferous trees were much used for fuel or firewood. This familiar spiny shrub, bearing golden-yellow flowers, which have (especially the double-flowered kind) a scent resembling the taste of Cocoanut, is mostly used for burning, as by bakers, wherewith to heat their ovens. It is even sown in some places for this purpose. The ashes contain so much alkali that they have been used as a substitute for soap. When the shoots have been well bruised, so as to reduce the prickly nature, they are eaten with much relish by horses, as they supply a very nutritious fodder. Good milk is produced by cows fed upon Furze, and if it be cut finely it is excellent for sheep. It has also been used chopped up into

small pieces and sown in drills with Peas, proving a good defence against the attacks of birds and mice. The story is told of Linnæus, who tried to grow a plant in his greenhouse at Upsal, but with great difficulty, that when he first saw it on an English common forming sheets of gold he fell on his knees in thankfulness for its loveliness.

Broom (Cyt'isus, *Plin.*, scopa'rius, Fig. 75).—*Cytisus*, Pliny says, is a corruption of *Cythnus*, whence Lucerne (?) came. *Scoparius* is from *scopæ*, thin twigs, hence they are fit for making brooms or besoms. A.S. *brom*, a word of same origin as *bramble*, has given the name to the articles. One use of broom in the fourteenth century was to take shavings of the bark and to place it on a wound to staunch blood. The blossoms were used with Dyers' Greenweed for making an unguent. This plant was the badge of the Plantagenet kings (the name being derived from *Planta genista*). The "broom tops" were formerly employed to impart a bitterness to beer, and are now used medicinally, being included in our British Pharmacopœia. The stems would supply a good fibre if required, like that of the Spanish Broom (*Spar'tium jun'ceum*), which has long been so employed. The seeds have been used on the Continent as a substitute for coffee. Like the Furze, it grows well near the sea, so that both have been used for hedges there. It also contains much alkali in the ash, which was once used as "Salts of Broom" (*Sal genistæ* in medicine. It is also very serviceable for thatching.

Black Medick (Medica'go lupuli'na, Fig. 76).—This little annual resembles a yellow-flowered Clover with its trifoliate leaves, but it has a spirally-

coiled black pod. When cultivated it grows to a good-sized herb, and is prized as a nutritive fodder plant for sheep and cattle, especially when mixed with grasses. The leaflets fold up in sleep just like those of Clover, the two basal ones rotating through 90° so as to be vertical; then they meet and place their upper surfaces together, while the terminal leaflet revolves through 180° and covers the others like a sloping roof.

Lucerne (Medica'go sati'va, Fig. 77).—The Latin name being arrived from the Greek *Medike*, became introduced by the Medes of the army of Darius, according to Pliny. The English name is apparently derived from the Swiss Canton, but it seems doubtful. The little purple flowers are peculiar in exploding when visited by bees. Though often found in uncultivated places, it is really an escape from cultivation, as it is a native of Eastern Mediterranean regions, but has long been grown in South Europe. It has only been cultivated in England since 1757. It requires a light, dry, and chalky soil if possible, and, as it can be cut four or five times in a season, it is a rather exhaustive crop unless liberally treated.

Melilot (Melilo'tus, Plin., officina'lis, Fig. 78).—From Lat. *mel*, honey, and *lotus*, Theoph., a word of unknown origin. This herb, which is not truly indigenous, grows from 2 feet to 3 feet in height, bearing long racemes of yellow flowers having the scent of hay or that of the Tonka bean, both containing the same chemical principle. The leaves are trifoliate. It was more cultivated in past times, but has been superseded by Lucerne, Clovers, and Sainfoin. Moreover, cattle do not appear to relish

77. Medicago sativa.

78. Melilotus officinalis.

79. Melilotus alba.

80. Trifolium pratense.

the flavour much. On the Continent it is valued, as in Switzerland, for the purpose of flavouring Gruyère cheeses. The flowers and seeds are bruised and mixed with the curd previous to being pressed. The flowers have supplied a perfume, and, as the name implies, are very attractive to bees.

White Melilot (M. al'ba, Fig. 79).—This British species has white flowers and occurs in many places. It is an excellent honey plant, and is cultivated for bees.

Red Clover (Trifo'lium praten'se, Fig. 80).—From Lat. *ter*, three, and *folium*, leaf; hence the name Trefoil. Clover is probably from a Frisian word, meaning a club, from Lat. *clava*, hence the three-knobbed "club" of cards.

This species, as well as the Dutch and the Alsike clover (*T. hyb'ridum*), introduced from Sweden, are the chief sorts cultivated. The crimson clover (T. incarna'tum, Fig. 81) has also been introduced, and produces a heavy crop, more especially in the south.

The red clover is one of the most important of field crops; it is generally sown with the corn in spring, and by growing up after the corn is reaped affords a very nutritive fodder subsequently.

It is sometimes ploughed in as a green crop, as lupines were by the ancients; because leguminous plants have the power of storing up much nitrogen which they obtain from the air by the aid of microscopic fungi within the nodules formed on the roots.

It is said to have been first grown in England in 1645.

White or Dutch Clover (T. re'pens, Fig. 82).—This is a valuable pasture plant on account of its

81. Trifolium incarnatum.

82. Trifolium repens.

83. Trifolium procumbens.

84. Anthyllis Vulneraria.

creeping and rooting habit. A single plant will cover a square yard in one year. The seeds have been used for bread in time of scarcity. It supplies honey for the hive bee, which is unable to obtain it from the red clover.

Hop Clover (T. procum'bens, Fig. 83).—The name is in reference to the resemblance of the inflorescence to that of hops in miniature. This is an annual, and therefore not so valuable for a first crop except when it can fill up spaces on poor soils, as loose sand or shingly gravel, where it may be introduced with advantage.

Kidney Vetch (Anthyl'lis, *Diosc.*, Vulnera'ria, Fig. 84).—From the Grk. *anthos*, flower, and *ioulos*, down, in allusion to the downy calyx; *vulner'aria*, because good for wounds, *vulnus;* kidney-vetch, because "it shall prevayle much against the strangury and the payne of the reynes" (sixteenth century).

A yellow dye used to be obtained from this plant. Sheep eat it, especially on the Downs, and it has been recommended as a good fodder crop.

Bird's-foot Trefoil (Lo'tus, *L.*, cornicula'tus, Fig. 85).—The meaning of *Lotus* is uncertain; *cornicula'tus* means, in the form of a horn, in reference to the fruit, which more resembles bird's claws; Lat. *cornic'ula*, a little crow. This is a valuable fodder plant mixed with other nutritious grasses. The yield is too small for a heavy crop. The larger variety, or species *L. ma'jor*, makes very good hay, but not equal to the clovers.

Sainfoin (Ono'brychis, *Diosc.*, sati'va, Fig. 86).—From Grk. *onos*, an ass, and *brucho*, to bray, the animal braying to get it! Sainfoin is from

85. Lotus corniculatus.

86. Onobrychis sativa.

87. Vicia sativa.

88. Lathyrus sylvestris.

Fr. *sain*, wholesome, and *foin*, hay. Though regarded as a truly British wild flower, it may often be a relic of cultivation. It grows about 2 feet in height, and bears spikes of pink or crimson flowers with one-seeded, wrinkled pods. It was introduced as a fodder plant in the seventeenth century, though long cultivated on the Continent. It grows particularly well on chalky soils, as on the Surrey and Sussex Downs, and yields an abundant return and makes excellent hay.

Tare, or Vetch (Vic'ia, *Varro*, sati'va, Fig. 87).—This is a very old fodder plant in Southern Europe, and is probably not truly indigenous, though often found in a wild state here. It is an annual, with one or two nearly sessile purple flowers seated in the axil of the leaves. As it is a climber, Oats or Rye are often grown with it for a support. Like other leguminous plants it is very nutritious, as they all abound in nitrogen. It has been ploughed in to enrich the soil, a practice common in Pliny's time, only the husbandmen then used other leguminous plants as well. The seeds are used for poultry and other birds. Pliny makes the interesting observation that Vetches and Lupines enrich the soil; "indeed so far is a field or vineyard from standing in need of manure that the Lupines will act upon the soil as well as the very best." We now know the cause of this to be that leguminous plants can store up the nitrogen of the air by means of microbes which are located in the nodules formed upon the roots.

The origin of the Lat. *vicia* is obscure, but thought to be connected with *vincere*, to bind, in allusion to the tendrils. Vetch is the same word as

Fitch of the Middle Ages. Tare is also of obscure origin.

Everlasting Pea (Lath'yrus, *Theoph.*, latifo'lius, Fig. 88).—Pea, formerly pease; Lat. *pisum*, so called because peas were pounded in a mortar; Lat. *pinso*, to pound. This is very near to our wild species *L. sylvestris*, of which it may be only a cultivated form, and is occasionally itself found in a wild state. Though the stem and foliage, like those of the common meadow Vetchling (*L. pratensis*), are highly nutritious, such perennials are not suited for field culture. It may be advisable to add that the Yellow Vetchling (*L. Aph'aca*) is one of the few which have distinctly poisonous properties. This species is readily known by its long-stalked solitary yellow flowers and pairs of triangular stipules. The leaf is represented by a long slender tendril usually without any leaflets.

Sea Pea (L. (Pi'sum) marit'imus, Fig. 89).—This plant grows on shingly beaches of the eastern counties, as at Walmer and on the Suffolk coast. Though the seeds are unpalatable, they were used in a time of great scarcity in 1555 at Aldborough. It is not now grown anywhere as a cultivated plant.

Bitter Vetch (L. (Or'obus) macrorrhi'zus, Fig. 90). —*Orobos*, Grk. for some Vetchlike plant; *macrorrhizos* Grk. for long-rooted. This bears a cluster of purple flowers on a stalk, and, instead of the leaf terminating in a tendril, it has only a short point. It is common in woods. The old name (*O. tuberosus*) refers to the small underground tubers or rhizomes, which have a sweet taste, abounding in starch or sugar, and are very nutritious whether cooked or not. They are chewed in the Highlands of Scotland

like the Betel-nut in India. In some parts of Scotland a spirit is made from them. On the Continent they are roasted like Chestnuts.

THE ROSE FAMILY.
(*ROSACEÆ*).

Sloe or Blackthorn (Pru'nus, *Plin.*, commu'nis, Fig. 91).—"Sloe" refers to the tartness of the fruit. This is the origin of the Bullace (sub. sp. *insiti'tia*), and of the Plum (sub. sp. *domes'tica*), being common in hedges, &c., all over England. It has spines or abortive branches in the wild state; but these become developed into branches under cultivation, so that Plum-trees become spineless. The fruit is too astringent for food, but makes a fair conserve. British port wine has been made with it, and the juice affords a good marking ink. Some sixty years ago the leaves were collected for making "lie" Tea, and advertised as a substitute for Tea leaves. The present writer possesses a sample of it; but as it was employed in adulterating China Tea it was suppressed. The bark of the Sloe, being astringent, has been used as a substitute for cinchona in ague and fever. The wood is particularly strong, so is useful for the teeth of rakes, &c. The sub-species Bullace has globose drupe, black or yellow in colour. This name is derived from the Sp. *volas, i.e.*, bullets; the Lat. *bullas* means the bosses on bridles to which the Bullace bears a resemblance. It is occasionally wild; but doubtfully so in many places. It extends to North Africa and the Himalaya. It is somewhat austere in

89. Lathyrus maritimus.

91. Prunus communis.

90. Lathyrus macrorrhizus.

92. Prunus Cerasus.

flavour, but much less so under cultivation. The second sub-species, the domestic Plum, is only indigenous in West Asia. Plums of many sorts have been grown since the ancient days of Greece and Rome. Thus the Damson is mentioned by Pliny as having been introduced from Damascus into Italy before 100 B.C. The Green Gage came from Chartreuse and was brought there by Claude, the wife of Francis the First, and is still called Reine Claude. Prunes are a variety especially cultivated in South France and dried. Plum-trees constantly throw up suckers from their roots, by which they might be propagated, but they are generally grafted in order to retain good sorts.

CHERRY (Pru'nus sp.).—Lat. *prunus* is from Grk. *proune*, a shortened form of *proumnos*. The word "Cherries" is from the Fr. *cerise*, but used as a plural; the *s* being then dropped to make the singular "cherry." This fruit is derived from three British species. The Wild or Dwarf Cherry (P. Cer'asus, Fig. 92) occurs in many parts of England and is regarded as indigenous. It is the origin of the Morello, Duke, and Kentish Cherries. In the wild state the fruit is small and acid. Gean (P. A'vium) is found in copses and woods; but is probably wild only in the south. It is the origin of the Geans, Hearts, and Bigaroon Cherries. Pliny says of it: "The Cherry did not exist in Italy until the victory of L. Lucullus over Mithridates, in the year of the city 680. He was the first to introduce this tree from Pontus, and now, in the course of 120 years, it has travelled beyond the ocean and arrived even in Britannica." It extends from Europe to the Himalayas, and is called Ceras in Persia, so that

this word is probably the origin of the name. In the fourteenth century, ground-up cherry-stones were supposed to cure the "stone," by the law of signatures. The wood is very compact, so is useful for cabinet work and for pipes. On the continent a spirit is distilled from the fruit known as Kirschenwasser. Noyau and Ratafia are said to be flavoured with the kernels, which, like the Almond (another species of Pru'nus), develop prussic acid. Maraschino is also prepared from a variety of Cherry grown in Dalmatia.

Bird Cherry (P. Pa'dus, *Theoph*, Fig. 93) is the third British species, also occurring in copses and woods.—Padus was the Latin name for the river Po; but why it was applied to this tree is unknown. It is called "bird" cherry, as being only fit for birds, which are fond of the fruit. It has racemes and not umbels of flowers. It bears small, black, and bitter fruit, formerly used in Scotland to flavour gin and whisky. The wood of this species is very prettily veined, so is used by cabinet-makers, but is rather small, being more useful for the handles of tools.

Meadow-Sweet, or Queen of the Meadows (Spir'æa, *Theoph.*, Ulma'ria, Fig. 94).—*Ulma'ria* is from *ulmus*, elm, from some resemblance in the leaves. This familiar herb, frequenting ditches by roadsides and meadows, &c., is also called Queen of the Meadows. It was supposed to have medicinal virtues in its fragrant flowers, but without any good reason. It was one of the fifty ingredients in a drug called "Save," mentioned in Chaucer's "Knight's Tale," when, after the battle, "eek save they drunken, for they wolde here lymes have." It was called Medwort in the fourteenth century.

Dropwort (Spiræ'a Filipen'dula, Fig. 95).—The specific name is from *filum*, a thread, and *pendula*, hanging; because the knobs on the roots are joined by fine root-fibres. This occurs in dry pastures, as the Chalk Downs of Sussex. It has pinnate leaves and tuberous roots, which have been used as food in times of scarcity on the Continent. In the Middle Ages it was called Philipendula and Fisalidos, and was supposed useful for the stone. Being hard, it was beaten up with the stony Gromwell fruits and Cherry stones on the principle of "like cures like."

Cloudberry (Ru'bus, *Plin.*, Chamæ'morus, Fig. 96).—Is a native of the mountains of Scotland and Ireland. *Chamæmorus* means ground mulberry. It is quite a dwarf plant, under 12 inches in height. The fruit is of an orange colour, well flavoured, and sometimes made into a preserve; but it is more used in Scandinavia, where the plant is abundant. It is a cooling and delicious fruit eaten with sugar and cream. Vinegar is also made by the fermentation of the fruit in Sweden. It has been found very efficacious in fevers—"The symptoms of amendment were almost instantaneous after eating the berries." Laplanders are said to bury them in the snow for preservation during the long Arctic winter.

Raspberry (R., *Plin.*, Idæ'us, Fig. 97).—It derives its name Idæus from "Mount Ida on which it groweth" (Gerarde). The wild Raspberry takes the place of the Blackberry in the North, as about Perth and even at Buxton in Derbyshire, occurring in woods and hedges. The berries are as pleasant to eat, but smaller than those of the cultivated variety.

93. Prunus Padus.

95. Spiræa Filipendula.

94. Spiræa Ulmaria.

96. Rubus Chamæmorus.

It is said that the inhabitants of Skye use them for making syrup and spirituous beverages. As also in Poland, the juice is simply fermented. Gerarde figures and describes it as "*Rubus Idæus*, the Raspis bush or Hindberrie," but speaks of the fruit as "of taste not very pleasant." It was called Raspa in the fourteenth century, and Raspberry wine was then made from it and used as medicine. The Raspberry was first transplanted and cultivated in the reign of Edward I. in the thirteenth century.

Blackberry (R. frutico'sus, Fig. 98).—Pliny says that "the bramble bears Mulberries, one variety having a flower like a rose, known as *cynosbatos*, *i.e.*, dog-bramble. The Blackberry has numerous subspecies and varieties. Used as a drug in the Middle Ages, it is now one of the very few wild fruits of this country, which is largely collected and sold by the fruiterers.

Avens or Herb-Bennet (Ge'um urba'num, Fig. 99).—The name Avens is from the Lat. *Aven'cia;* but this word cannot be explained. *Ge'um* is from Grk. *geuo*, to yield an agreeable flavour. This plant had several names in the fourteenth century, as *Assarabac'cara*, *gariophila'ta*, *peslep'oris*, or Harefoot, as well as *Aven'cia* and *A'vens*. The second is connected with *Caryophyllus*, because the rhizome smells like cloves, as does the flower of the Clove pink (*Dian'thus Caryophyl'lus*). It was used for curing festers, as being an astringent, and perhaps as a disinfectant; besides this, it was put into ale to prevent its turning sour, just as oil of cloves is used to-day for keeping paste.

Strawberry (Fraga'ria, *Plin.*, ves'ca, Fig. 100).—*Fraga* is from Sansk, *ghra*, meaning fragrant. It

97. Rubus Idæus.

99. Geum urbanum.

98. Rubus fruticosus.

100. Fragaria vesca.

was called Streowberige in the tenth century. The syllable streow means straw and refers to its runners resembling straws (Skeat). The "stalke," probably the runners, were used in medicine in the fourteenth century, and called Streberywyses. They were a drug in a preparation for fresh wounds and a "Drynk of Antioch." The wild Strawberry was cultivated in England in Edward I.'s reign, as well as the Alpine form, *F. collī'na*. It is a curious fact that this is the only one which can be grown satisfactorily in Malta, as the large fruited garden Strawberries (from America) fail to form and ripen there. It is probably the origin of the Haut-boy, *i.e.*, *haut-bois* or *high wood* of Bohemia; whence it came.

Marsh Cinque-Foil (Potentil'la Co'marum, *Theoph.*, Fig. 101).—From Lat. *potens*, powerful; because of its astringency; *comaros* was a name of some plant, supposed to be the Strawberry tree. It is a herb growing to 1 foot or 2 feet high in bogs and ditches, having dull purple flowers, being commoner in Ireland than England. It has a strongly astringent root or rhizome, formerly used in tanning leather. It also yields a yellow dye. It has been stated that the Irish used to stain their milk pails with it.

Tormentil (P. Tormentil'la, Fig. 102).—So called for its relieving pain of toothache; from O. Fr. *torment*. It was used for the stone in the fourteenth century, is a small plant abounding on heaths, recognisable by the flowers having four yellow petals. The thick root-stock is very woody and extremely astringent, 1 lb. equalling 7 lb. of Oak bark in this respect. The root-stock also yields

101. Potentilla Comarum.

102. Potentilla Tormentilla.

103. Potentilla reptans.

104. Potentilla anserina.

a red colour, which has been imparted to leather and wood in Lapland, &c. It is still retained in the Pharmacopœia for its valuable astringent properties.

Cinque-Foil (Potentil'la rep'tans, Fig. 103).—This was of considerable use in the fourteenth century, and was then often called "vif-leuyd grase," *i.e.*, "five-leaved herb." It was supposed to cure all stomachic complaints, being astringent.

Goose-grass, or Silver-weed (P. anseri'na, Fig. 104).—So called because geese eat it, and for the silvery and silk-like hairs on the foliage. It is said that in the Hebrides the inhabitants often use it for food, either boiled or roasted, and that it tasted like parsnips. Pigs readily eat it. The powdered, dried leaves are astringent and were used for agues.

Ladies' Mantle (Alchemil'la vulga'ris, Fig. 105).—From Arabic *Al kemelych*, *i.e.*, Alchemy, from its supposed virtues. It is allied to the Burnets, and, like them, is astringent. The leaves are eaten by cattle, especially where it grows in abundance in meadows, as about Buxton and other hilly regions.

Agrimony (Agrimo'nia Eupato'ria, Fig. 106).—From Eupator, King of Pontus, who discovered its use. The meaning of *Agrimonia* is unknown. Like the preceding, this is an astringent plant and much used formerly as a tonic. Gerarde (1597) even says it was called "Philanthropos," because of the great esteem in which it was held. The plant can yield a good yellow, pale or deep in colour. In the fourteenth century it was called Egrimoyne (Chaucer) and used for clearing the eyes, and also with mugwort and vinegar for a "bad back" and "alle woundes."

105. Alchemilla vulgaris.

106. Agrimonia Eupatoria.

107. Poterium Sanguisorba.

108. Sanguisorba officinalis.

Salad Burnet (Pote'rium, *L.*, Sanguisor'ba, Fig. 107).—*Pote'rium* means a drinking-cup; because it was taken in wine, according to Pliny; while "salad" of course implies another use. The English used to put it in tankards. "Burnet" means *brunette*, or brown, in reference to the flowers; *sangui-sorba* signifies "blood-stanching." In the fourteenth century it was an ingredient in a preparation for keeping wounds from festering, probably because of its astringency. It was one of the fifty ingredients of "Save," mentioned by Chaucer. It is very nutritious, so that sheep delight in it, and was formerly cultivated. This plant is also very astringent. It was called *Pimpinella Hortensis*, Garden Burnet, in Gerarde's time.

Great Burnet (P. officina'le, Fig. 108).—A much larger plant than the preceding, with globular purplish heads and pinnate leaves, being frequent upon chalky soil. It is cultivated for fodder on the continent. It was used medicinally as a vulnerary and for its astringent properties.

Dog Rose (Ro'sa, *Plin.*, cani'na, Fig. 109).—From Grk. *rodon*, red. As a conserve the heps of this Rose have been long used in pharmacy. They also formed a common dessert dish in the sixteenth century, for Gerarde says they "maketh the most pleasante meats and banqueting dishes, and tarts and such like."

The petals of the Dog and cultivated roses, called rede-brere or roser (Chaucer) in the fourteenth century, were used in several preparations for wounds, and in ointments.

Pliny tells us that roses and violets were the chief flowers used for garlands, hence the expression

109. Rosa canina.

110. Pyrus communis.

111. Pyrus Malus.

112. Pyrus torminalis.

"under the rose." He compares the hep to an alabaster unguent box, "it develops the calyx and embraces the yellow-pointed filaments which stand erect in the centre."

The rose was used by the ancients for perfuming the delicacies of banquets. Pliny adds that the Rose of Miletus never had more than twelve petals; but one called *centifolia* had at least a hundred.

Improved varieties of this wild rose are in cultivation.

Wild Pear (Py'rus, *Plin.*, commu'nis, Fig. 110). —Pliny tell us that in his time (first century A.D.) there were forty-eight varieties of pear. All kinds, he adds, were indigestible, and invalids were forbidden to eat them as rigidly as wine was to be avoided. They were eaten boiled with honey. The ashes of the pear-tree were used to poison toadstools. He also tells us that "A load of apples or pears, however small, is singularly fatiguing to beasts of burden. The best plan is to give them some to eat, or at least to show them the fruit before starting.' The pear is doubtfully indigenous, and when found wild in hedges, &c., it may have been a descendant of trees grown in old Monkish gardens. It is the origin of all cultivated varieties, as several kinds were known to the Romans. The "Warden" was first grown in the grounds of Warden in Edward I.'s reign (thirteenth century), and was borne on the arms of the Cistercian Convent in Bedfordshire, where it was first planted. Similarly the Pears are in the armorial bearings of the City of Worcester, as this fruit was cultivated in that county for perry. The wood of the Pear tree being very hard has been used for the coarser kinds of wood engraving.

Crab Apple (P. Ma'lus, *Varro*, Fig. 111).—The "root" of the word "Apple" is the same in all Celtic and Sclavonian languages. The tree is, therefore, probably introduced. *Ap.* means, in Zend and Sanskrit, "water," and *p'hala* "fruit"; so that the name possibly meant "juicy-fruit." *Pomum*, the Lat. for Apple, is derived from *potare*, to drink, and *poculum*, a cup. Like the Pear, the wild Apple trees are often degenerated forms from cultivation. The fruit is very austere and acid. The juice known as "verjuice" is used for bruises and sprains in the country. It is sometimes added to cider in Ireland to impart a roughness. All cultivated Apples are derived from this tree, and several varieties were well known to the ancients. The Pippins were so called because they were raised from seed, but grafting has been practised for ages. Professor Bailey says that the original Newtown Pippin when grafted on stocks growing in the different States of North America or in Australia soon assumes the prevailing character of the Apples in those regions respectively.

Wild Service (P. tormina'lis, Fig. 112).—*Tormina'lis* means "good against the colic"; Service is from *cerrisia*, a sort of beer made from the fruit referred to by Virgil (*Geor.* iii. 379). This is a local tree occurring in woods and hedges. It bears small fruits, somewhat spotted and very acid. After a frost, however, it becomes mealy and agreeable, and is occasionally offered for sale.

Service-Tree (P. domes'tica) is really a native of South Europe, it was formerly much cultivated in this country, only a rare specimen here and there being now to be found wild, *i.e.*, in the forest of Wyre, near Bewdley. It much resembles the

Mountain Ash, but is more tomentose, and the fruit is larger and more pyriform. It appears to have been common in Gerarde's time. He figures it, observing: "It produces browne berries, somewhat long, which are not good to be eaten vntill they have lien a while, and vntill they be soft like the Medlar; whereunto it is like in taste."

White Beam (P. A'ria, *Theoph.*, Fig. 113).—This tree has a hard and close-grained wood, used for yokes, &c. The cogs of mill-wheels used to be made of it. The fruit, resembling that of the Mountain Ash, become edible after frost. When fermented it will yield an alcoholic spirit.

Mountain Ash or Rowan (P. Aucupa'ria, Fig. 114).—Rowan is the old Norse *runa*, a charm against the Evil Eye, which was hung over the doors of a cowhouse. This resembles the Service-Tree, but the fruit is different. Gerarde figures it under the names "Quicken tree," "Wilde Ashe," or "Wilde Service tree." The modern name is the translation of the Latin, *Montana Fraxinus*, of the ancients. The scarlet fruit abounds in malic acid, and a small amount of prussic acid, which might prove harmful to children. Many superstitions are attached to this tree. It was a preservative against witchcraft, a twig being carried about the person in Scotland for this purpose. The berries are largely eaten by thrushes and other birds, but are austere to the taste unless made into a conserve with sugar.

The berries are dried for flour in North Europe, and when fermented yield a strong spirit. Jelly is also made from the fruit, as a substitute for red-currant jelly for game; but it has an astringent flavour. The

113. Pyrus Aria.

115. Cratægus Oxyacantha.

114. Pyrus Aucuparia.

116. Saxifraga granulata.

wood is hard and of a fine grain, and takes a good polish.

HAWTHORN (Cratæ'gus, *Theoph.*, Oxyacan'tha, *Diosc.*, Fig. 115).—From the Grk. *kratos*, strength, in allusion to the hardness of the wood. *Oxyacantha*, *i.e.*, "sharp-thorn," was applied to Barberry, and Sweet-briar as well, in the early centuries. Hawthorn signifies "Hedge-thorn"; hence as a name of the fruit, in the phrase "heps and haws," it is a misnomer.

The leaves of the tree with savin and pepper were put in ale to restore speech to a voiceless man in the fourteenth century.

It is now principally grown for hedges, as of old, under the name "quick-set."

THE SAXIFRAGE FAMILY.

(*SAXIFRAGEÆ.*)

SAXIFRAGE (Saxif'raga, Plin., sp.)—So called because of its supposed virtues in destroying the stone or *calculus*. The Lat. word means "rock-breaker." *S. granula'ta* (Fig. 116), is a species having little bulbs (or "grains," hence the specific name), formerly used for its supposed virtues. Perhaps the fact that species growing in cracks of rocks were thought to break them; hence their use by the supposed law of signatures.

CURRANT, RED and BLACK (Ri'bes ru'brum, Fig. 117, and ni'grum, Fig. 118).—The English name is taken from the small grape from Corinth, known as "grocer's currants"; *Ribes* was an Arabic term for a special kind of Rhubarb. The currants are wild

117. Ribes rubrum.

118. Ribes nigrum.

119. Ribes Grossularia.

120. Sedum Rhodiola.

in northern countries and have long been cultivated.

Gooseberry (R. grossula'ria, Fig. 119)—The Lat. sp. name is from *grossus*, an unripe fig. It is indigenous in North of England and the source of all garden varieties.

THE STONECROP FAMILY.
(*CRASSULACEÆ.*)

Rose-root (Se'dum Rhodi'ola, Fig. 120).—Lat. *rhodia radix*, from the odour and rosy tint of its root-stock. This is an alpine and arctic sp. and used in Greenland for a salad, the leaves being also applied for a headache. A fragrant water has been made from the rhizome.

Orpine (S. *Plin.* Teleph'ium, *Diosc*, Fig. 121).—*Sedum* is from the Lat. verb *sedeo*, "to sit," in allusion to the squat form of the plant on rocks, &c. Telephus, a son of Hercules and King of Mysia, supplied the sp. name. Orpine is a contraction from orpiment, a yellow mineral, at first given to yellow-flowered species, but now transferred to one with pink flowers. It was also called *ornal* in the fourteenth century, and used in various drugs. It is mucilaginous and astringent and good for intestinal troubles.

Biting Stonecrop or Wall-pepper (S. a'cre Fig. 122).—So called from its acrid taste. Pliny says it would produce sleep, but it must be first wrapped up in a black cloth and put under the pillow, without the patient being aware of it, or it would be useless. In the Middle Ages, it was

121. Sedum Telephium.

122. Sedum acre.

123. Sempervivum tectorum.

124. Lythrum Salicaria.

recommended for dropsy. It acts as an emetic, and has been found useful for scorbutic disorders.

Houseleek (Sempervi'vum tecto'rum, Fig. 123).—This was called Ayron, sengreen, *i.e.*, "evergreen," barba-Jovis, &c., in the fourteenth century. It was then used as an ingredient of a preparation for neuralgia called hemy-greyne,, *i.e.*, "megrim." It formed an ointment for scalds and burns, being slightly astringent.

THE LOOSESTRIFE FAMILY.
(*LYTHRARIEÆ.*)

Purple Loosestrife (Lyth'rum, *L.*, Salica'ria, Fig. 124).—From Grk. *luthron*, gore, from the purple colour of the flowers. *Sali'caria* is from *salix*, willow, from the shape of the leaves. The plant is astringent and tonic, a popular remedy in Ireland for complaints requiring those properties.

THE WILLOW-HERB FAMILY.
(*ONAGRARIEÆ.*)

Rose Bay or French Willow (Epilo'bium angustifo'lium, Fig. 125).—From the flower apparently growing upon a long pod, Grk. *epi*, upon, and *lobos*, a pod. Rose-bay was originally given to the Oleander by Turner (sixteenth century); and now transferred to this species of Willow-herb, so called from the Willow-like leaf.

It has long been cultivated. It was once used as an adulteration in tea. The leaves have also

125. Epilobium angustifolium.

126. Bryonia dioica.

127. Apium graveolens.

128. Carum Carvi.

been boiled as a vegetable, and the young shoots like Asparagus. In Kamtchatka they are fermented to make beer, which is rendered highly intoxicating with the aid of the poisonous toadstool *Aga'ricus musca'rius.*

THE BRYONY FAMILY.
(*CUCURBITACEÆ*).

Bryony (Bryo'nia, *Diosc.*, dioi'ca, Fig. 126).—From Grk. *bruo*, to shoot. In the fourteenth century it was called "wylde nepte," and used as an antidote to leprosy. The juice was also used in Dwale, an anæsthetic drug for operations. The thick root is sometimes sold as the Mandrake, a quite different and foreign plant (p. 124). It is very poisonous and acrid. It is a powerful but dangerous cathartic. It was formerly used for dropsy. The red berries are also dangerous, but have been used for dyeing.

THE PARSLEY FAMILY.
(*UMBELLIFERÆ.*)

Celery (A'pium, *Plin.*, grave'olens, Fig. 127).—A'pium was Pliny's name for Parsley, Water-parsley, &c. Cellery or Sellery is a corruption from Grk. *seli'non.* This is a common ditch plant near the sea, but not infrequently inland as well. It is unwholesome when green, if not really poisonous. By earthing up the deleterious property is not developed. In Malta it is never blanched, but used for flavouring only. The Turnip-rooted variety, known as "Celeriac," is much used on the

Continent. It is an Italian name; the old English terms were "ache" and "Smallage." It was much used in drugs in the Middle Ages for gout, festers, &c.

Caraway (Ca'rum, *Diosc.*, Ca'rui, Fig. 128).—*Ca'rum* is from Caria, where it grew. *Carui* means seeds *of Careum*, a term of the sixteenth century. It is a naturalised plant, having escaped from cultivation, being one of the group of umbellifers characterised by having carminative properties, like Cumin, Dill, and Anise, but is grown for flavouring purposes. The scattering seeds over cakes has long been practised. Cumin is now used for so doing in Southern Europe, and the black seeds of "Fitches" (*Nigel'la*) were so employed by the ancients. The name was derived from Caria, whence, Pliny says, the plant was received. The roots are also edible, like Parsnips, while the foliage might be used as salad, or instead of Spinach.

Parsley (C. Petroseli'num, Fig. 125), *i.e.*, "rock-selinon"; hence percely and parsley.—This is regarded by Hooker as an escape, as it is rarely found wild. It was certainly cultivated here in the fifteenth century, and probably before. Wreaths of Parsley were given to victors in the Nemean games of Achaia. St. Paul alludes to them as "corruptible crowns." Pliny says that sprigs in milk were used for sauces; with honey, for the eyes, and for live fish when ailing. Some said that it should not be eaten, as it was consecrated to the funeral feasts in honour of the dead. Pliny adds seventeen medicinal virtues in it.

Gerarde calls it "Parsele," describing it as "delightfull to the taste and agreeable to the stomache; while

the roots or seeds boiled in ale cast forth strong venome or poyson." Chaucer calls it "Persly." It was much used for medicine in the sixteenth century.

Gout-weed (Ægopo'dium Podagra'ria, Fig. 130).—*Ægopo'dium* means goat's-foot, from the leaf. *Podagra'ria* signifies "gout in the feet." It is a much-creeping herb found near buildings, and supposed to have been introduced and cultivated in the Middle Ages. It was also called Herb Gerard and Bishop's-weed in the sixteenth century. Though many remedies are given for gout in the fourteenth, this plant is not mentioned. The name *Podagra'ria*, Gerarde says, was given by Germans. The young leaves are said to be eaten as a green vegetable in Sweden and Switzerland.

Burnet Saxifrage (Pimpinel'la *Fuchs*, Saxif'raga, Fig. 131).—From *bipen'nula, i.e.*, twice pinnate or feather-like; in allusion to the leaves. *Saxifraga* (*i.e.*, stone-breaker) refers to its supposed medicinal virtues. The plant is acrid and stimulant. In Germany it has been used for dropsy, asthma, tooth-ache, and to clear the skin from freckles.

Cicely (Myr'rhis, *Diosc.*, odor'ata, Fig. 132).—From *Myrrha*, myrrh, because of the scent of the leaves. Cicely is from the Grk. *ses'eli*, some unknown plant of this family. This occurs in pastures, &c., usually near houses, as it was formerly much cultivated as a potherb, eaten either as a salad or boiled, and is still so used in Germany. It is very aromatic and carminative and stimulant. It was called Great Chervill or Myrrhe in Gerarde's time. In Germany it was used in soups, and the seeds were formerly employed in the North of England for polishing and perfuming oak floors and furniture.

129. Carum Petroselinum.

130. Ægopodium Podagraria.

131. Pimpinella Saxifraga.

132. Myrrhis odorata.

[Chervil (Anthris'cus, *Plin.*, Cerefo'lium).—The origin of the name is unknown; but it was probably of some plant of this family. *Cerefo'lium* was the official name in early centuries. This is a rare plant and only occurs as an escape from cultivation or introduced with other seed. It was formerly grown as a potherb and for salads. Turner, writing in the sixteenth century, says: "If it be eaten in a sallat, it is good for the stomache and the head, by reason of the pleasant smell that it hath." It was called Cerfoile, Sistrum, and Sisaron in the fourteenth century.]

Beaked-Parsley (A. vulga'ris, Fig. 133).—This plant was formerly used as a potherb.

Fennel (Fœnic'ulum, *Plin.*, officina'le, Fig. 134).—The Latin name is from *fœnum*, hay, from the scent. Pliny records twenty-two remedies in fennel. He observes that serpents taste it when they cast their old skins, and that they sharpen their sight with the juice by rubbing against the plant! This is probably native as a maritime plant, as at Barmouth and the Channel Isles. It was used in former days with St. John's-wort to be suspended over doors at midsummer against evil spirits, &c. It is carminative and aromatic, like many other umbellifers, the oil of fennel distilled from it being chiefly employed. It was used in a variety of ways as a drug in the fourteenth century.

Coriander (Corian'drum, *Theoph.*, sati'vum, Fig. 135).—From Grk. *koris*, a bug; from the odour. It is only found in waste places, as an escape from cultivation, as it has long been cultivated in South Europe, and introduced into England. It will be remembered that Manna was described as being

133. Anthriscus vulgaris.

135. Coriandrum sativum.

134. Fœniculum officinale.

136. Chrithmum maritimum.

round like Coriander seed, the fruits of this plant being exceptional in that respect. Pliny attributes twenty-one remedies to it. It was used pounded and sprinkled over meat with cummin and vinegar. This would preserve all kinds of meat in hot weather. Like Caraway, the fruits (miscalled seeds) are used for flavouring bread and confectionery, and for curry powder. It is recommended in a receipt of the fourteenth century for "reed pympyl that warit on the face," *i.e.*, a red pimple that annoys.

Samphire (Crith'mum, *Diosc.*, marit'imum, Fig. 136).—The name is from Grk. *krithe*, barley; from the shape of the fruit. This has fleshy succulent leaves, due to the presence of salt, as it grows on maritime rocks. The name is a corruption of San Pietro, as it is called in Italy, the Herb of St. Petre. Gerarde described it as furnishing "the pleasantest sauce, and best agreeing with man's body, for the digestion of meats, &c." Cattle are fond of the foliage. The entire plant makes an excellent pickle.

Lovage (Ligus'ticum, *Diosc.*, sco'ticum, Fig. 137). —Named from Liguria, where it abounds. Lovage was Love-ache formerly, from *Levis'ticum*. This is found on rocky coasts of Scotland. The foliage is used as a green vegetable, raw or cooked. An infusion is used as a remedy for cattle, being aromatic and carminative. Another, a European species (*L. officina'le*), is the Lovage of the garden, and much used as a drug plant in the fourteenth century. The roots and fruit are aromatic and stimulant, and employed in hysterical disorders.

Angelica (Angel'ica sylves'tris, Fig. 138).—The name was given for its supposed value in dispelling

137. Ligusticum scoticum.

138. Angelica sylvestris.

139. Peucedanum Ostruthium.

140. Pastinaca sativa.

plagues and poisons. It dyes a good yellow. *A. Archangel'ica* or *A. officina'lis* is occasionally found as an escape from cultivation. The stalks are candied with sugar as a sweetmeat. They used to be eaten, blanched like celery, in salads. The root and fruit were employed medicinally as an excellent tonic and aromatic stimulant.

MASTER-WORT (Peuce'danum, *Diosc.*, Ostru'thium, Fig. 139).—Grk. *Peuce* is pine, and *danum* (for *donum*), a gift; so called from its resinous exudation. Masterwort is a translation of its old name *Imperato'ria*, perhaps after some emperor. This is a rare plant and naturalised, having been formerly cultivated as a potherb and used in medicine in the Middle Ages. Herbalists attributed the name to its supposed "commanding" virtues over the ills of man. It is called "Masterwoort or False Pellitory of Spain" by Gerarde, who thus described its virtue: "It is not only good against all poison, but also singular against all corrupt and naughtie aire and infection of the pestilence, if it be drunken with wine." He also adds a number of other uses; but it is really only an aromatic stimulant.

WILD PARSNIP (P. (Pastina'ca) sati'vum, Fig. 140).—From Grk. *pastos*, food. Parsnip is from the first syllables of *Pas*-tinaca and *Nap*-us, combined. This is the origin of the garden Parsnip. The "Student," "the best in the trade," was raised from it by Professor James Buckman at the botanic gardens of the Royal Agricultural College, Cirencester, from 1847–1851, when Messrs. Sutton and Sons issued it. The Parsnip was known to the Romans, who collected the wild plants and improved the roots by growing them in a rich soil;

but, adds Pliny, "it is quite impossible to get rid of the strong pungent flavour." In the Channel Islands a large variety is grown for cattle. It is said that in Ireland Parsnips were mashed up and fermented for a kind of beer. It has also been used as a drink instead of coffee. The seeds are aromatic and were formerly used as a drug.

CARROT (Dau'cus, *Diosc.*, Caro'ta, Fig. 241).—*Dau'cus* is from the Grk. *daio*, to burn; as all the ancients described it as a heating plant. *Caro'ta* is probably from *caro*, flesh; from the colour. The wild Carrot is extremely common; when ripening the umbels close up, forming so-called "birds' nests" in the country. It is the origin of the garden vegetable. The long and short forms (like those of Radishes) originated by being grown in a loose and stiff soil respectively, but are now hereditary, as after careful selection they come true by seed. A spirit has been distilled from Carrots on the Continent, as it contains an abundance of sugar, which is readily converted into alcohol.

HEMLOCK (Coni'um, *Theoph.*, macula'tum, Fig. 142).—Called Homlock in the fifteenth century, is from A.S. *hæm.*, *i.e.*, straw or haulm, and *leac*, plant; from the withered hollow stalks. The poisonous juice of this plant, or perhaps of the Water Hemlock (*Cicu'ta (viro'sa)* was given to Socrates. It was used with henbane, opium, bryony, and vinegar as an anæsthetic drug, called Dwale, in the fourteenth century for operations. Mixed with betony and fennel-seed, it was supposed to be a cure for the bite of a mad dog. It is retained in the British Pharmacopœia.

ALEXANDERS (Smyr'nium, *Diosc.*, Olusa'trum, Fig. 143).—The Latin name is from Grk. *Smyrna*, *i.e.*,

myrrha, myrrh, from the scent; while *Ol'us a'trum* means "black potherb"; for which it was formerly much used, the foliage being of a dark green colour. The English name is from *Alexandrinum*, being a plant of Macedon, the country of Alexander.

THE DOGWOOD FAMILY.
(*CORNACEÆ.*)

Cornel (Cor'nus, *Plin.*, sanguin'ea, Fig. 144).—*Cor'nus* is the Lat. form of the Grk. *kranei'a*, the cornel-tree. From Homer we learn that the fruit was given to swine; and that the tough wood was used for spear-shafts and bows. This is a hedge shrub or small tree, with opposite leaves, corymbs of creamy white flowers, and black berries. The wood is hard, and was formerly used for cog-wheels, as well as for butchers' skewers and ramrods. It is one of the best woods for gunpowder. The fruit contains a good deal of oil, which might be utilised if necessary, as it is in France, for the manufacture of soap. The berries are not edible, and, as Parkinson observes, not even "fit for dogs," hence its name Dogwood, but it is a doubtful etymology, though Prickwood, as it is also called, is a more appropriate term, since skewers and wooden pins were made of it formerly.

THE HONEYSUCKLE FAMILY.
(*CAPRIFOLIACEÆ.*)

Guelder Rose (Vibur'num, *Varro*, Op'ulus, Fig. 145).—This was called Ople-tree by Gerarde; but it

141. Daucus Carota.

142. Conium maculatum.

143. Smyrnium Olusatrum.

144. Cornus sanguinea.

is said that *Op'ulus* was from *Po'pulus*, the poplar; from some similarity in the leaves. The name guelder is from Gueldres, the country of its discovery. As a wild plant, only the neuter flowers on the circumference of the cluster or truss have enlarged corollas; but in the garden form all the otherwise perfect flowers have become neuters with enlarged corollas, thereby making the familiar ball, resembling a double rose.

Dane-wort (Sambu'cus, *Plin.*, Eb'ulus, *Virgil*, Fig. 146).—The origin of the English name is obscure; but it was called Danes-blood, from growing abundantly at Slaughtonsford (near Chippenham), where a battle with the Danes took place. This herbaceous shrub is also called Dwarf Elder, and in the fourteenth century was known as Ebulus and Walwort. In the sixteenth century a synonym was *Chameactis*, derived from the Greek words *cha'mai*, on the ground, and *ac'te* the dwarf elder; but the origin of "Dane-wort," is obscure. It was used for gout, fester, wounds, &c., in the fourteenth century, and was held in rather high repute, as every part of the plant is cathartic and emetic. The berries yield a violet dye.

Elder (S. ni'gra, Fig. 147).—Called Hyldor and Hyllantre in the fourteenth century, from A.S. *ældl*, fire; as the hollow stems were used for blowing up a fire. It is well known for its large scented corymbs of yellowish-white flowers, purple berries (sometimes green when ripe), and leaves resembling those of the Ash-tree. The flowers, which yield a volatile oil by distillation, are used in poultices, &c., and the berries make excellent wine; yet an infusion made from the leaves is fatal to insects, so that

145. Viburnum Opulus.

146. Sambucus Ebulus.

147. Sambucus nigra.

148. Lonicera Periclymenum.

gardeners often use a strong infusion to preserve delicate plants from insects and caterpillars. In the fourteenth century the middle bark of the Elder was used for dropsy.

Honeysuckle (Lonice'ra, *L.*, Pericly'menum, *Diosc.*, Fig. 148).—Linnæus gave the name in honour of Lonicer, a botanist of the sixteenth century. Grk. *peri*, around, and *kleio*, to climb, suggested the specific name. Honeysuckle is from A.S. *hunigs'uge* (the privet), from A.S. *su'gan*, to suck (Skeat).

This has been long cultivated for its fragrant flowers and climbing propensities.

THE BEDSTRAW FAMILY.

(*RUBIACEÆ.*)

Wild Madder (Ru'bia, *Plin.*, peregri'na, Fig. 149).—From Lat. *ruber*, red. It yields a very good dye, said to be but little inferior to that of the cultivated species, *R. tincto'rum.*

Lady's Bedstraw (Ga'lium, *Diosc.*, ve'rum, Fig. 150).—The English name is derived from its use in former days for bedding, even by ladies of rank. The name Galium is from the Greek *gala* (milk), probably in relation to its property of coagulating milk. This plant can furnish a red dye like its ally, the Madder of the Continent (*Ru'bia tincto'rum*). It has been cultivated for this purpose, but with little or no profit, as the roots are too small, though it has been used in the Hebrides for dying woollen stuffs red. The stem and leaves are described as yielding a good yellow dye used in Ireland. A peculiarity of the plant resides in its property of acting

149. Rubia peregrina.

150. Galium verum.

151. Galium Aparine.

152. Asperula odorata.

like rennet in curdling milk. It is used in Gloucestershire for this purpose. It was called "cheese renning" in the sixteenth century, and Gerarde says (quoting from Matthiolus, a famous commentator of Dioscorides) "the people of Thuscane do use it to turne their milke, and the cheese which they make of sheepes and goates milke, might be the sweeter and more pleasant to taste. The people in Cheshire, especially about Namptwich, where the best cheese is made, do use it in their rennet, esteeming greatly of that cheese above other made without it."

Cleavers (G. Aperi'ne, Fig. 151).—From Grk. *apairo*, to seize. This plant is extremely common and well known for its little twin berries; it is also called Goosegrass as a food for geese, being often collected for poultry. Horses and cattle will eat it with relish.

The seeds are described as being an excellent substitute for coffee; but whether they contain the same peculiar alkaloid is not known, though both plants belong to the same family. It is said they are used for this purpose in Sweden. It is also remarkable that the custom of employing the stems as a sieve in the time of Dioscorides is still maintained in Sweden. It was used as an ointment for scalds and burns in the fourteenth century, under the names Heyryt, Cosgres, Cliure, and Tongebledes, or, as we should spell them, Goosegrass, Cleaver, and Tonguebleed, doubtless from its roughness due to incurved hooks all over the plant. Later uses were for colds, swellings, &c., the whole plant being rather astringent.

Wood-ruff (Asper'ula odor'ata, Fig. 152).—From

Wood-roue, for *rouelle*, Fr. for "wheel," in allusion to the spoke-like arrangement of the leaves in whorls. It is remarkable for its sweet scent of hay. The common name in the fourteenth century was Herb-Water or Herb-Walter; and in the French *Muge de boys*, Musk of the Woods, or Wuderove as early as the thirteenth century. Later it was spelt in a rhyme,

WOODDE-
ROWFFE.

It was much used in medicine in the Middle Ages; but without having any real virtues.

Squinancy (A. cynan'chica, Fig. 153).—So-called from its efficacy in quinsy, called formerly squinsy; derived from Grk. *kun-anche*, *i.e.*, "dog-strangle," from its choking nature.

THE VALERIAN FAMILY.

(*VALERIANEÆ.*)

Cat's Valerian or All-heal (Valeria'na officina'lis, Fig. 154).—This was called *Amantilla* in the fourteenth century, and a curious recipe runs as follows: "Men who begin to fight and when you wish to stop them, give to them the juice of *Amantilla*, *i.e.*, Valerian; and peace will be made immediately." It is retained in the British Pharmacopœia as a nerve medicine, being anti-spasmodic. Its properties are due to a volatile oil in the roots. The scent has a remarkable attraction for cats and rats, these latter being caught by a bait of Valerian root.

Corn Salad (Valerianel'la olito'ria, Fig. 155).—This little plant is found in cornfields, &c., and is also called Lambs' Lettuce. It is a doubtful native, as it has been long cultivated, but superseded by other plants for salads. It is much more known on the Continent.

THE TEASEL FAMILY.

(*DIPSACEÆ.*)

Teasel (Dip'sacus, *Diosc.*, sylves'tris, var. Fullo'num, the Fullers' Teasel, Fig. 156).—The name is from Grk. *dipsao*, to thirst, in reference to the connate, opposite leaves holding water. Teasel is from A.S. *tæsan*, to the teasing or scratching of wool. The common wild Teasel is of no value, though supposed to have medicinal virtues in olden times, when the water caught in the little troughs between the opposite leaves was thought useful for bad eyesight. It was called *Vir'ga pasto'ris* in the fourteenth century, and was an ingredient of "Save," a remedy for wounds. The Fullers' Teasel is a variety with recurved bracts on the heads of flowers. They are used for raising the nap on cloth. A number of heads were placed in a flat, brush-like frame, and drawn over the cloth. A later method is to fix them on a revolving cylinder. It is remarkable that no artificial invention has superseded the natural Teasel-head for this purpose. The stem, as of many other plants with opposite leaves, is subject to a curious torsion. Some years ago they were utilised for parasols, being very light, and sold under the name of "Eucalyptus" handles.

Devil's-bit Scabious (Scabio'sa succi'sa, Fig. 157).

153. Asperula cynanchica.

155. Valerianella olitoria.

154. Valeriana officinalis.

156. Dipsacus sylvestris.

—So called as being a remedy for scab ; *succisa* means "cut off," the decaying end of the rhizome suggesting the English name. It is a common meadow-plant. It is used on the Continent as supplying a yellow and green dye. It is a very astringent plant, and the rhizome has been employed as a material for tanning purposes. "There is no better thing against old swellings of the throte" (Gerarde).

THE "COMPOSITE" FAMILY.
(*COMPOSITÆ.*)

Daisy (Bel'lis peren'nis, Fig. 158).—From *bellus*, pretty. Daisy is from A.S. *dæges-eage*, day's eye. In the fourteenth century it was an ingredient of the ointment "Save" for wounds, for gout and fevers. It was called bon-wort (*i.e.*, bone-wort) and briswort (*i.e.*, bruise-wort). In 1771 Dr. Hill said that an infusion of the leaves was "excellent against Hectic Fevers."

Elecampane (I'nula Hele'nium, Fig. 159).—Inula is a corruption from Grk. *Helenion*, from Helen. Elecampane is *Enula-campana*, from its growing wild in Campania. A local and usually naturalised plant, having been cultivated for centuries, as it was a common remedy for sicknesses in the fourteenth century. Its use was for pulmonary complaints. It is now chiefly employed as a sweetmeat, formed of the candied root.

Chamomile (An'themis, *Diosc.*, no'bilis, Fig. 160). —From *anthos*, flower. Chamomile is from Grk. *Chamaimelon*, ground-apple, probably from the scent. This is a common wild flower on the cliffs round

157. Scabiosa succisa.

159. Inula Helenium.

158. Bellis perennis.

160. Anthemis nobilis.

our shores. It must not be confounded with "wild Chamomile" (*Matrica'ria Chamomil'la*). The receptacle of the former is covered with scales between the florets, while that of the latter has none. Both species are used (the "wild" being more so on the Continent) for stomachic qualities, but in commerce it is usually the "double" form, in which the yellow disc florets of the wild species are converted into white flowers like those of the ray. This kind is also of a milder nature than the single and wild form.

Tansy (Tanace'tum, *Plin.*, vulg'are, Fig. 161).—It was originally called *Athana'sia, i.e.*, immortality; from which *Tanacetum* is regarded as a corruption. This was a remedy for wounds in the fourteenth century. It is bitter and a tonic, being used in the country for fever and other illnesses, and is drunk as a "tea." It was used in cookery in the sixteenth century, when Tansy cakes were highly esteemed in Lent, as well as Tansy puddings, according to Gerarde.

Mugwort (Artemis'ia vulga'ris, Fig. 162).—From A.S. *Mæg*, a maiden; called also moder-wort, as a specific for women's ailments. Mugwort seems to have been an adaptation, because it was put into mugs of ale to flavour them. In the fourteenth century it was regarded as a drink against pestilence.

Wormwood (Artemis'ia, *Diosc.*, Absin'thium, *Diosc.*, Fig. 163).—This is the true Wormwood. According to Pliny the name was derived from the goddess Artemis. It was a favourite drug in the Middle Ages. It was also hung up in rooms as a preventive from infection. Even in the last century a spray of Southernwood with Rue was always placed by the prisoner in the dock as a preventive against jail

161. Tanacetum vulgare.

162. Artemisia vulgaris.

163. Artemisia Absinthium.

164. Artemisia maritima.

fever. It is used in beer on the Continent and flavours absinthe.

Sea Wormwood (Artemis'ia marit'ima, Fig. 164). —All the species are bitter and aromatic, having powerful scent, as *A. Absin'thium* and Southernwood. The minute flower-heads of a Russian variety of the Sea Wormwood, dried, constitute the drug "Santonica" (Wormseed) of our Pharmacopœia, and the English name indicates its use.

Coltsfoot (Tussila'go, *Plin.*, Far'fara, Fig. 165). —From Lat. *tussis*, a cough. Coltsfoot is from the shape of the leaf. This has been used as a demulcent and pectoral drug. The leaves, being mucilaginous, furnish a suitable remedy for coughs. The leaves are sometimes smoked, being said to be a part of British tobacco. In the fourteenth century this was used as an electuary against all evils of the stomach, as well as for broken bones; also for the "drye cohw" (dry cough).

Groundsel (Sene'cio vulga'ris, Fig. 166).—From Lat. *senex* an old man; in allusion to the white hair or pappus on the fruit. Groundsel is from A.S. *grundeswelge*, lit. "ground-swallower," as an abundant weed. It is mentioned as a cultivated plant in the fifteenth century. Dr. Hill, 1771, observes: "This common weed has many uses, though neglected," and he mentions some for female ailments.

Knapweed (Centaure'a, *Plin.*, ni'gra, Fig. 167).— From *centaur;* Knapweed is Knop-weed; in allusion to the knob like head. It was called Matfellon in the fourteenth century, and included in the ointment "Save," for wounds and the pestilence. It was used also with pepper for loss of appetite.

Cornflower or Bluebottle (C. Cy'anus, *Plin.*,

165. Tussilago Farfara.

167. Centaurea nigra.

166. Senecio vulgaris.

168. Centaurea Cyanus.

Fig. 168).—*Cyanus* is Lat. for blue. Long cultivated as a garden plant, it has several varieties of colouring, such as shades of blue and pink, as well as white.

Chicory (Cichor'ium, *Theoph.*, In'tybus, Fig. 169).—The meaning of Chicory is unknown. *Intubus* is Endive. This plant is easily recognised by its wiry, branching stem and bright blue flowers of the size and shape of a Dandelion. It is the tap-root, much enlarged by cultivation, which supplies the chicory of commerce, when roasted and ground to powder. The leaves when blanched form the salad known as Barbe de Capucin.

Several of the *Tribe* Cichoriaceæ formed the "bitter herbs" of the Scriptures.

Dandelion (Tarax'acum officin'ale, Fig. 171).—From Grk. *tarasso*, to disturb, on account of its curative effects upon bodily disorders. Dandelion is from Fr. *dent de lion*, lion's tooth; the application of which is unknown, unless it refers to the "toothed" margin of the leaves.

Lettuce (Lactu'ca, *Plin.*, viro'sa, var. (?) Scari'ola, Fig. 170).—*Lactu'ca* is from *lac*, milk; in allusion to the milky juice. Some botanists make it a separate species. Like all the plants of the tribe Cichoriaceæ, with long, ligulate corollas, it has a milky juice, somewhat like opium, but it is really different. "Lac"—Latin for milk—suggested the name, which also supplied that of a noble Roman family, Lactucinus, just as the Fabii took their name from Beans (Faba). It was introduced in the Middle Ages, as it is mentioned in the fourteenth century as "latewes." The name "Cos" seems to indicate a Mediterranean source, though De Candolle

169. Cichorium Intybus.

171. Taraxacum officinale.

170. Lactuca Scariola.

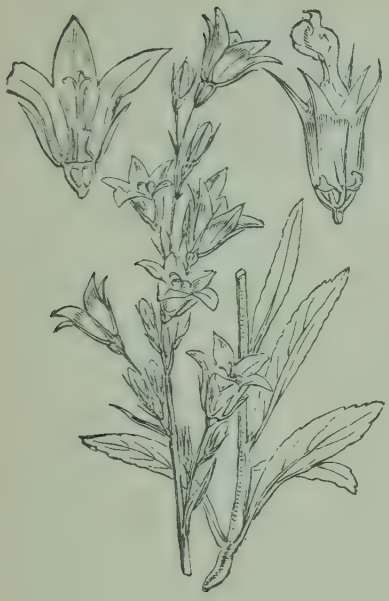
172. Phyteuma spicatum.

thinks it was of Indian origin. Hooker gives Europe, Siberia, and Himalaya as native places. It was found in higher Egypt by the late Dr. Sickenburger, of Cairo.

THE BELLFLOWER FAMILY.
(*CAMPANULACEÆ.*)

Great Rampion (Phyteu'ma, *Diosc.*, spica'tum, Fig. 172).—From Grk. *phuton*, a plant. It was called *Rapuntium maius* in the sixteenth century and cultivated for its root as a salad. Rampion, Fr. *raiponce*, from Lat. *rapun'culus*, a small *rapa*, turnip. It is rare in England, occurring in East Sussex, and is a doubtful native.

Rampion (Campan'ula Rapun'culus, Fig. 173).—*Campan'ula* means little bell, and *Rapun'culus*, a little turnip. It was formerly cultivated for its root, which was eaten as a salad, raw or boiled. Gerarde called it *Rapuntium paruum*, the Small Rampion. Though several foreign species are in our gardens, the British wild species cultivated are *C. latifo'lia*, occurring from Banff to North Wales and Gloucester, as well as Surrey. Both blue and white flowered are grown. *C. rotundifo'lia* is the Harebell of England, but Bluebell of Scotland. Of this there are white, blue, and double varieties; *C. Trache'lium* and *C. glomera'ta*, of which there are several cultivated varieties, are also well known. The garden "Canterbury Bells" are varieties of *C. me'dium* of Central Europe.



173. Campanula Rapunculus.

174. Vaccinium Myrtillus.

175. Vaccinium Vitis-Idæa.

176. Vaccinium Oxycoccos.

THE HEATH FAMILY.

(*ERICACEÆ.*)

Bilberry, Blaeberry, or Whortleberry (Vaccin'ium, *Plin.*, Myrtil'lus, Fig. 174).—The berries were much used as a "rob," *i.e.*, they were boiled till thick and then honey and sugar were added—in fact, a jam. They are now used for tarts in the more northern counties. The fruit is a favourite food of grouse.

Cowberry (V. Vi'tis-Idæ'à, *Plin.*, Fig. 175), *i.e.*, the "Vine of Mount Ida."—The word Cowberry seems to have arisen from some confusion with Lat. *vacca*, a cow; *myrtil'lus* means little myrtle, from the shape of the leaves. The fruit of this species is more eaten on the Continent than in Britain, as round the Baltic. It is said that they are sold as Cranberries in London, having come from Sweden.

Cranberry (V. Oxycoc'cos, Fig. 176), *i.e.*, sharp-berry, from its acidity; Cranberry, because the fruit is ripe when the cranes appear.—This is a creeping plant, frequenting peat bogs, &c. It bears a red fruit. Though collected in the mountainous parts of England, the greater quantity are imported.

Strawberry Tree (Ar'butus, *Plin.*, Une'do, Fig. 178).—This is a native of the mountains of Killarney, and one of the Spanish group of plants in the south-west of Ireland. The peasantry eat the red strawberry-like fruit, but "eat one" is said to be the origin of the Latin specific name, as being enough. Turner, however, refers the name to the

177. Arc'ostaphylos Uva-ursi.

178. Arbutus Unedo.

179. Erica cinerea.

180. Calluna vulgaris.

habit of only one berry being borne at a time. They are made into a wine in Corsica.

Bearberry (Arctostaph'ylos U'va-Ur'si, Fig. 177).—Both the Lat. words mean the same as the English, from the fruit being eaten by bears, as representing wild animals in general. This is a trailing evergreen with dark green leaves, which dried is a drug in a Pharmacopœia, valued for its astringency. The berries are only of use as food for grouse, &c. The leaves are used for tanning in Sweden, as well as for a dye.

Heath (Eri'ca, *Diosc.*, cine'rea, Fig. 179).—From Grk. *ereiko*, to break; from its supposed use, like saxi-frage, *i.e.*, stone-breaker. The flowers supply much honey to bees, and impart a peculiar flavour to it. In the Hebrides a kind of beer is made from heath-tops and malt. Medicinally, heath is an astringent, but is not now employed.

Ling (Callu'na vulga'ris, Fig. 180).—From Grk. *kalluno*, to cleanse (as with brooms made of it), or adorn. Ling is, perhaps, from A.S. *lig*, firewood, or fuel. This useful plant covers the ground on many mountains, supplying fodder for sheep, but less so for cattle. It is said that their milk is tinged red by it. Highland dwelling-places are made with alternate layers of Ling and earth, and then thatched with it, as well as affording material for bedding. In the eighteenth century it was much used for tanning leather, as well as for yellow and orange dyes. Lastly, brushes, brooms, baskets, &c., are made of the pliable shoots of Ling.

THE THRIFT FAMILY.

(*PLUMBAGINEÆ.*)

THRIFT (Arme'ria vulga'ris, Fig. 181) is chiefly used as an edging to borders and flower-beds, having grass-like leaves and tufts of pink or white flowers.

THE PRIMROSE FAMILY.

(*PRIMULACEÆ.*)

PRIMROSE (Pri'mula vulga'ris, Fig. 182).—Usually regarded as from Fr. *prime rose ;* but historically it is from *Primerole* of the Middle Ages, from Lat. *primus*, first (the word "rose" has nothing to do with primrose except as an error). Medicinally it acts as an emetic. In the fourteenth century it was used for "Save" for wounds, as an ingredient, with watercress, violet, and avens, for the liver; for "schaking of hede and of handes," and for a person "who cannot speak well."

COWSLIP (Pri'mula ve'ris, Fig. 183).—Was called Britannica Cusloppe in the tenth century, and used as a drug in the fourteenth; but now, perhaps rarely, for Cowslip wine. When well prepared it has been described as very intoxicating, resembling the sweet wines of Southern France.

SOWBREAD (Cyc'lamen, *Theoph.*, europæ'um, Fig. 184).—Probably from Grk. *kuklos*, round; from the coils in the fruit-stalk; so called because swine eat the roots greedily in Sicily and elsewhere in Southern Europe. The globular tuber is very acrid and dangerous to man, though pigs are immune to it The poison resides in an active principle called cyclamine.

Poor Man's Weather-glass, or Pimpernel (Anagal'lis, *Diosc.*, arven'sis, Fig. 185).—The first name is from the flowers closing as soon as the sun is off. Pimpernel is from Lat. *bipennella*, usually applied to plants with "pinnate"—*i.e.*, feather-like—leaves, in the sixteenth century, as of the Burnet-saxifrage (*Pimpinel'la Saxif'raga*, Fig. 131). Strange to say, this little plant has borne the reputation of a cure for hydrophobia; though it seems to possess some acrid property, as birds have died from eating the leaves given to them instead of Chickweed.

THE ASH or OLIVE FAMILY.

(*OLEACEÆ.*)

Ash (Frax'inus, *Plin.*, excel'sior, Fig. 186).—From A.S. *æsc.*, meaning a spear, made from the wood because of its toughness. This tree supplies one of the most useful of woods, on account of its toughness and elasticity. An Ash pole bears a greater strain than any other wood of the same thickness, hence it has long been used for all purposes requiring lightness and strength, such as spears and handles of agricultural implements. The stumps produce an excellent coppice, the shoots being cut every five or six years. These make very good packing-cases, as well as Hop-poles. Walking-sticks, hoops, baskets, &c., are made of the shoots. The lower part of the trunk is often veined, &c., and is used for veneering. The leaves have often been used for fodder. Manna, a form of sugar, is obtained from the sap of several species of Ash, including the British one, in Southern

181. Armeria vulgaris.

182. Primula vulgaris.

183. Primula veris.

184. Cyclamen europæum.

Europe, for it requires a higher temperature than Britain affords. It differs from ordinary sugar in being unable to undergo fermentation. It is mildly laxative, and included in the British Pharmacopœia. The half-ripe fruit or "keys" were formerly eaten pickled as a salad, and were esteemed for their supposed medicinal value.

PRIVET (Ligus'trum, *Plin.*, vulga're, Fig. 187).—The chief use of this shrub or tree is for hedges, which, when clipped, grow very compact. The dark black-purple berries have been used for a green-coloured dye for woollen cloth.

THE GENTIAN FAMILY.

(*GENTIANEÆ.*)

YELLOW CENTAURY (Chlo'ra perfolia'ta, Fig. 188).—From Grk. *chloros*, the pale green colour of the foliage. This plant is a familiar one in chalk countries, easily known by its eight yellow petals and "perfoliate," or rather "connate," leaves. It is bitter like the other members of the family, and has been similarly employed. It also yields a yellow dye.

CENTAURY (Erythræ'a Centau'rium, *Diosc.*, Fig. 189).—*Erythræa* is in reference to the red flowers, from Grk. *eruthros*, red; *Centau'rium* is after the Centaur Chiron, who was famous for his knowledge of medicine, is a little annual with rose-coloured flowers, and contains a bitter principle like the Gentians; hence it has been used for the same purposes, as tonics and febrifuges. It is an excellent stomachic.

185. Anagallis arvensis.

186. Fraxinus excelsior.

187. Ligustrum vulgare.

188. Chlora perfoliata.

GENTIAN (Gentia'na, *Plin.*).—Pliny says it was first discovered by Gentius, King of Illyria. There are many species of this genus in Switzerland, the high mountainous ones being of a deep, brilliant blue colour. There are six in England, well known for the bitter qualities of their roots. The Swiss *G. lu'tea* is used in the British Pharmacopœia, but our own *G. Amarel'la* (Fig. 190) (from *ama'rus*, bitter) and *G. campes'tris* (Fig. 191) have been popular astringents.

BUCKBEAN (Menyan'thes, *Diosc.*, trifolia'ta, Fig. 192).—From Grk. *Mēn*, a mouth, and *anthos*, flower; Buckbean was buckes-beane in the old Herbals, derived from a Dutch word *bocks-boonen*, a corruption of Lat. *scorbutus*, scurvy. This is an aquatic plant. The leaf has three oval leaflets, with a sheathing stalk. The flowers form a raceme, having a fringed, pinkish-white corolla. The leaves in this case are used as a tonic and febrifuge. The foliage has been employed in place of Hops as an adulteration. Though fraudulent, it is not injurious.

THE BORAGE FAMILY.

(*BORAGINEÆ.*)

VIPER'S BUGLOSS (E'chium, *Diosc.*, vulga're, Fig. 193).—Bugloss means ox-tongue, from the roughness of the foliage. Grk. *echis* is a viper. The word "Viper" is given from a fancied resemblance in the spots on the stem to those on a viper; but others say it was the shape of the seed that resembled the head of a snake, hence on the doctrine of "signatures" or resemblances the plant

189. Erythræa Centaurium.

190. Gentiana Amarella.

191. Gentiana campestris.

192. Menyanthes trifoliata.

should cure snake bites. Of course, it has no such power.

Borage (Bora'go officina'lis, Fig. 194).—This is a common South European weed, as by roadsides in Malta. It was at one time highly appreciated as a cordial and for catarrhs. The fresh tops are still put into tankards for "cooling," this being due to the nitrate of potash in the plant. Gerarde, in his "Herbal," 1597, says: "Those of our time do use the flowers in salads to exhilarate and make the mind glad, to comfort the heart, and driving away of sorrow."

Comfrey (Sym'phytum, *Diosc.*, officina'le, Fig. 195).—*Symphytum* means "grown together," and Comfrey is from *con-firma ;* in allusion to the uniting of bones. This was a famous remedy for wounds in the Middle Ages, and called Consolida, Knytte-wort, or Knit-back. It was also used for quinsey and whooping cough, as well as bruises. As the plant abounds in mucilage it has been used like Marsh Mallow as an emollient for intestinal troubles. The foliage when young is often eaten in the country as a vegetable ; it also affords excellent fodder for cattle.

Alkanet (Anchu'sa, *Hippoc.*, officina'lis, Fig. 196). —Anchusa, Grk. *ancho,* to constrict ; from its medicinal properties. *A. arven'sis,* Bugloss, or Ox-tongue, as this word means in Greek, was formerly much used as a cordial. Alkanet is a purple dye obtained from the root of *A. tinct'oria,* a foreign species.

Gromwell (Lithosper'mum officina'le, Fig. 197).— Gromwell is composed of the unitalicised letters of *granum solis* and mi*lium solis*. *Litho-spermum* signifies stone-seed, from the hardness of the fruit. The

193. Echium vulgare.

194. Borago officinalis.

195. Symphytum officinale.

196. Anchusa officinalis.

nutlets of this plant are very stony, having a polished silicious surface, consequently it was thought to be intended as a remedy for the stone. *L. arven'se*, like Alkanet, yields a good red dye, and is said to be employed in Sweden for this purpose. Linnæus tells us that the women of Sweden stain their faces with it, perhaps in lieu of rouge.

Lungwort (Pulmona'ria officina'lis, Fig. 198).—From Lat. *pulmo*, the lungs. It was formerly regarded as a valuable remedy for phthisis; as the spots on the leaves, by law of signatures, were supposed to represent diseased lungs.

Hound's-tongue (Cynoglos'sum officina'le, Fig. 199).—This plant smells very disagreeably of mice; but was formerly used in medicine, being astringent if not narcotic as well. The very disagreeable odour made it fall into disrepute. A recipe of the fourteenth century says: "For him that may not well speak, give him to drink Hound's-tongue."

THE NIGHTSHADE FAMILY.

(*SOLANACEÆ.*)

Henbane (Hyoscy'amus, *Dioscorides*, ni'ger, Fig. 200).—The word means "hog's-bean," Grk. *kyos-cuanos*. Henbane is from A.S. *henne-belle*, probably in reference to the row of fruits like hanging bells; hence it was called *symphoniaca*, or ring of bells. Grk. *sumphonia*, however, originally referred to bagpipes. This, with opium, &c., formed a drug called "Dwale" in the Middle Ages to induce sleep for operations. The seeds were heated on a hot tile and the vapour inhaled in order "to slay the worms in the teeth."

197. Lithospermum officinale.

198. Pulmonaria officinalis.

199. Cynoglossum officinale.

200. Hyoscyamus niger.

The plant is in the Pharmacopœia, being valuable for its narcotic properties. It is a plant with a heavy disagreeable odour, clammy to the touch, from its glandular hairs. It bears dull yellow and dark-veined, bell-shaped corollas. The capsule bursts by a lid falling off. The roots have been eaten instead of Parsnips with serious results.

Bittersweet or Woody Nightshade (Sola'num, *Plin.*, Dulcama'ra, Fig. 201).—*Sola'num*, it is suggested, is from Lat. *sola'men*, comfort, from its sedative nature. This common shrub scrambling over hedges is well known by its clusters of purple flowers and scarlet berries. The name "Bittersweet" is given from the taste of the bark, which is bitter, but followed by a sweet flavour. The shoots dried are used in British medicine for certain cutaneous complaints. The berries have proved poisonous to a certain degree to children. It was called "Woody Nightshade" by the old herbalists to distinguish it from the "Deadly Nightshade."

Garden Nightshade (Sola'num ni'grum, Fig. 202).—This is a small herb with white flowers and purple berries. Like the last it has been used for the same purpose. It was called Petty Morel in the fourteenth century, and used for canker; and with Horehound and wine it was taken for dropsy. The berries are more or less injurious, especially to children, but are often eaten by adults with impunity, especially when quite ripe, as the poisonous principle is chiefly associated with all green parts.

Dwale, or Belladonna (At'ropa Belladon'na, Fig. 203).—*At'ropa* is from Grk. *Atropos*, one of the Fates, who cut the thread of life; in reference to its deadly poisonous nature. Italian

201. Solanum Dulcamara.

202. Solanum nigrum.

203. Atropa Belladonna.

204. Verbascum Thapsus.

ladies used to give brilliancy to their eyes by means of the juice; hence it was called Bella-donna. It is a shrub some 3 feet in height, bearing dingy purple, bell-like flowers and smooth black berries when ripe. These are intensely sweet, and have proved to be fatal to children and others who have eaten them. The dried leaves form the drug of our Pharmacopœia. They are strongly narcotic. It is an anodyne, and used for allaying neuralgia. Enlarging the pupil of the eye is a property possessed by the juice.

[MANDRAKE, a foreign species of At′ropa (A. Mandrag′ora), was used in Pliny's day as an anæsthetic for operations. The sleeping potion of Juliet was a preparation from this plant, perhaps the same as the Mandrake wine of the Ancients. It was also called *circæon*, being Circe's wine.]

THE FIGWORT FAMILY.

(*SCROPHULARINEÆ.*)

MULLEIN (Verbas′cum, *Plin.*, Thap′sus, Fig. 204). —The name was at first *barbascum*, from Lat. *barba*, beard; from the shaggy foliage. *Thapsus* is a place in Africa. This plant has a tall stem, with very woolly leaves, and a dense spike of yellow flowers. The leaves boiled in milk have been strongly recommended as an emollient for coughs. It was formerly called Candela, because it was a plant "whereof is made a manner of Lynke, if it be tallowed," as it is said in the "Great Herbal." The down upon the leaves consists of stellate hairs, which form a sort of felt and makes a good tinder when dry. It was

205. Linaria Cymbalaria.

206. Linaria vulgaris.

207. Scrophularia nodosa.

208. Scrophularia aquatica.

called Hag-taper, being supposed to be the witches' broom upon which they rode through the air, but the true derivation appears to be from *haga*, a "hedge," and not *packe*, a "witch," with *taper*, a "candle."

Ivy-leaved Toad-flax (Lina'ria Cymbala'ria, Fig. 205).—Toad arose from the Lat. *bubo'nium* having been written *bufonium*; "a toad," being Lat. *bufo*. *Lina'ria* is from the flax-like foliage, *li'num*. This now common plant was introduced from the Continent. It is eaten as a salad, having a hot taste, like that of Cress, hence it has been thought to have anti-scorbutic properties.

Common Toad-flax (L. vulga'ris, Fig. 206).—This is bitter and slightly acrid. It has been formerly employed in fomentations. The flowers were used in a skin ointment. In Sweden the plant is said to be boiled in milk for killing flies.

Figwort (Scrophula'ria nodo'sa, Fig. 207, and S. aquat'ica, Fig. 208).—Figwort arose from the doctrine of signatures in the disease called *ficus* (see *Ranun'culus Fica'ria*). These plants were formerly used as a remedy for scrofula, hence is derived the name of the family. They are—as so many of this order—emetic and purgative. It should be regarded with suspicion.

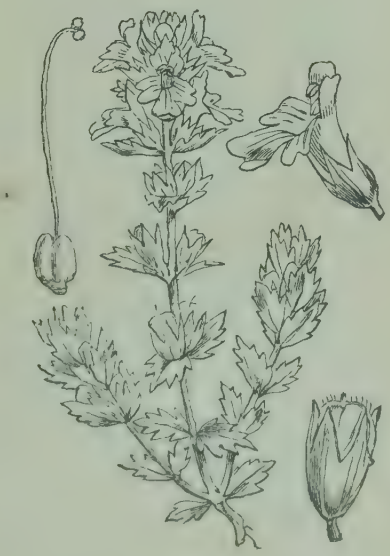
Foxglove (Digita'lis purpu'rea, Fig. 209).—The origin of the name Foxglove is very obscure. *Digita'lis* means finger-like. This is dangerously poisonous, having a strong action upon the heart. It is used medicinally for that purpose, but ignorant people have been poisoned by making a tea of the leaves.

Speedwell (Veron'ica officina'lis, Fig. 210), was formerly used as a tea, an old Danish botanist,

209. Digitalis purpurea.

210. Veronica officinalis.

211. Veronica Beccabunga.



212. Euphrasia officinalis.

Simon Paulli, contending that it was the true Tea of China! The derivation of *Veron'ica* [or *Veroni'ca*] is very obscure; the most likely suggestion is from Grk. *hiera*, sacred, and *eicon*, picture.

Brooklime (V. Beccabun'ga, Fig. 211).—From Germ. *Bachbunge* (*bach*, a brook, and *bunge*, a bunch). Brook-lime or Broklempke of old writers, meant brook-mud, from the plant growing in it. In the fourteenth century it was used for many complaints, including swellings, the gout, &c.

Eyebright (Euphra'sia officina'lis, Fig. 212).—A Grk. word for gladness. In the fourteenth century it was supposed to cure "all evils of the eye" and described as a "precious water to clear a man's sight and destroy the pin" (an excrescence on the eye).

Cow-wheat (Melampy'rum, *Theoph.*, praten'se, Fig. 213).—*Melas-pyros, i.e.*, black-wheat in Grk., because the seeds made bread black when mixed with flour. This is said to afford good fodder for cattle. According to Linnæus the butter of cows fed upon it is remarkably rich and of a deep yellow colour.

THE BUTTERWORT FAMILY.

(*LENTIBULARINEÆ.*)

Butterwort (Pinguic'ula vulga'ris, Fig. 214).—From Lat. *pinguis*, fat; in reference to the leaves, which are thick and unctious. Butterwort is so-called from the greasy feel of the leaf, due to the secretion from the insectivorous glands. This plant is common in wet places, especially in the West of England. Its leaves form a rosette, are spoon-shaped, and covered with glands, which catch insects

213. Melampyrum pratense.

214. Pinguicula vulgaris.

215. Verbena officinalis.

216. Mentha viridis.

and consume the nitrogenous substances from them. The Latin name, Gerarde says, refers to the "fatnes or fulnes of the leafe." The juice, he adds, was rubbed on cracked udders of cows, as it is done in Sweden. Linnæus states that in northern regions the fresh leaves are put into the reindeer's milk and strained. After a day or two it acquires a consistence and tenacity; the whey and the cream do not separate. It thus forms a favourite food in the north of Sweden. It does not act in the same manner on cow's milk.

THE VERVAIN FAMILY.

(*VERBENACEÆ.*)

Vervain (Verbe'na, *Plin*, officina'lis, Fig. 215). —This plant was considered to have many virtues of old, but it has now fallen into disuse, as having none. It was called Hierobotana, or the "sacred plant." Pliny tells us that the messenger sent to an enemy to demand the restoration of property was called *verbenarius*, for he carried a spray of Vervain, which rendered him inviolable. It was also used for cleansing the table of Jupiter on the occasion of the feasts of that god. Houses were purified with it. As a drug it was much valued in the fourteenth century, as, *e.g.*, the powder for stanching blood and healing wounds. The following is a curious test: "If a man lie sick, to know whether he shall live or die. Take Vervain in thy right hand, and take his right hand in thine; and let the herb be between, so that he does not know it. Ask him how he fareth and how he hopeth of himself.

217. Mentha piperita.

218. Mentha aquatica.

219. Mentha Pulegium.

220. Mentha sylvestris.

If he say he shall live and fare well, for certain then he shall live and fare well. But if he say he hopeth of no life, know well for certain that he shall die of that evil."

THE "LABIATE" FAMILY.

(*LABIATÆ.*)

Spear-mint (Men'tha vir'idis, Fig. 216).—This is the cultivated garden Mint, and only known as an escape, but is believed to be derived from the wild Horse Mint (M. sylves'tris, Fig. 220), indigenous in the South of England. It was much cultivated by the Romans and other Mediterranean nations. Pennyroyal and Mint were used by the Romans like smelling salts for fainting persons. In the fourteenth century it was used with salt for whitening the teeth, and for other purposes.

Peppermint (M. piperi'ta, Fig. 217).—This is also regarded as a cultivated form of Water-mint (*M. aquat'ica,* Fig. 218), which smells strongly of Peppermint. The drug "Menthol" is derived from a Japanese species (*M. piperas'cens*).

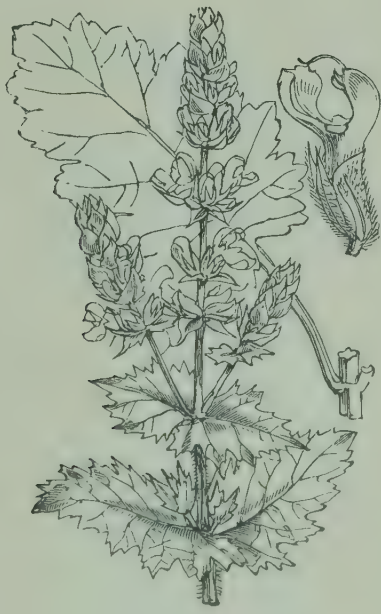
Pennyroyal (M. Pule'gium, Fig. 219).—From *pulex,* a flea; Pliny says that the blossom fresh gathered and burnt kills fleas by its odour. This species was formerly highly valued as a medicinal drug as well as for culinary preparations, hence it was called "Pudding Grass." It was known as Piliole-rial in the fourteenth century, and employed for various purposes, as to sharpen the eyes. It entered into the composition of "Save" for wounds.

Marjoram (Orig'anum vulga're, Fig. 223).—*Orig'anum* seems to be from Grk. *oros,* a hill, and

221. Thymus Serpyllum.

222. Calamintha officinalis.

223. Origanum vulgare.



224. Salvia Verbenaca.

gaios, joy. This plant is particularly abundant on calcareous soils, as in the south-east of England. As of others, the oil is an aromatic stimulant, and used as a remedy for toothache. It is now one of our kitchen herbs.

THYME (Thy'mus Serpyl'lum, Fig. 221).—*Thy'mus* is from Grk. *thuo*, to excite; *ser* is from *her* in *herpo*, to creep. Pliny says, when burnt it puts to flight all venomous creatures. It was also used in many internal complaints. Attic honey was considered the best where Thyme abounded.

CALAMINT or MOUNTAIN BALM (Calamin'tha, *Diosc.*, officina'lis, Fig. 222).—From Grk. *kale*, good, and *minthe*, mint. It has aromatic, tonic, and cordial properties, being often used as a herb-tea.

[BALM (Melis'sa, *Brunfels*, officina'lis).—*Melis'sa* is Grk. for *bee*; no doubt in reference to honey from this plant. It is a native of Southern Europe, but naturalised in the South of England. It has a strong lemon scent, especially when bruised; hence it is called *Citronelle* in France. It has a bitter, aromatic taste, and is carminative and stomachic.]

CLARY (Sal'via, *Plin.*, Verbena'ca, Fig. 224).—The Latin for sage, from *salvo*, to heal; in reference to its virtues. Clary is from Lat. *clarus*, clear; for the seed was put whole on the eye to cleanse it, in the fourteenth century.

CATMINT (Nep'eta, *Plin.*, Cata'ria, Fig. 225).—From *Nepi*, a town in Italy, and *catus*, a cat; because cats delight in the scent of the plant. In the fourteenth century an electuary was made with it and described as "good for all evils of the stomach," as well as for "aching wounds."

GROUND IVY, or ALE-HOOF (Nep'eta Glecho'ma,

225. Nepeta Cataria.

226. Nepeta Glechoma.

227. Brunella vulgaris.

228. Marrubium vulgare.

Fig. 226).—This early-flowering creeping plant is bitter and aromatic. It has been used for flavouring ale. Hence it acquired the name of "Gill" from the French *guiller*, "to ferment" beer; but as "Gill" also meant a "girl," the plant came to be called "Hedgemaids." The juice of this plant with that of Groundsel and Plantain was supposed to cure small ulcers in the eye, and to remove the white specks which sometimes appear in horses' eyes.

Self-heal (Brunel'la vulga'ris, Fig. 227).—From Germ. *bräune*, the quinsy, which it was thought to cure. It is mildly aromatic and slightly astringent, being used for gargles formerly.

Horehound (Marru'bium, *Plin.*, vulga're, Fig. 228).—The origin of both English and Latin names is obscure. This has long been valued as a remedy for coughs and pectoral complaints. As an example of a recipe of the fourteenth century is the following: "For man yat may nouzt for castynge, holde his mete—Take hulewort (Fig. 219) and horhoune and peper and seeth hem (them) wel in water and gyf hym ofte to drynke, and he shal sone hele." A tea is made from the woolly leaves.

Betony (Sta'chys, *Diosc.*, Beton'ica, *Plin.*, Fig. 229). —*Stachys* is Grk. for a spike or ear of corn; from the form of the inflorescence. With regard to Betonica, Pliny writes: "The Vettones, a people of Spain, were the discoverers of the plant known as Vettonica in Gaul." It is remarkable that this plant, which has no special virtues, was long regarded as a panacea for all the ills that flesh is heir to. Moreover, recipes and many pages descriptive of the virtues of Betony are given in the fourteenth-century medical books, including its use for driving away devils and despair!

229. Stachys Betonica.

230. Ballota nigra.

231. Teucrium Scorodonia.

232. Plantago major.

Black Horehound (Ballo'ta, *Diosc.*, ni'gra, Fig. 230).—From Grk. *ballo*, to cast away; on account of its disagreeable smell. It is employed in Sweden for cattle complaints, but not in this country now, though formerly it was recommended for hysteria.

Wood Sage (Teu'crium, *Diosc.*, Scorodo'nia Fig. 231).—*Teu'crium* is from the name Teucer, an ancient King of Troy, who is reported to have first used the plant medicinally. *Scorodo'nia* is from Grk. *skorodon*, garlic. This is a common plant in heathy districts. It has strong tonic as well as the usual aromatic properties of labiates. It was formerly used as a substitute for hops under the name of "Ambroisie" in Jersey.

THE PLANTAIN FAMILY.

(*PLANTAGINEÆ.*)

Plantain (Planta'go, *Plin.*, ma'jor, Fig. 232).—The origin of the name is unknown, unless it be from Lat. *planta*, the sole of the foot; from the shape of the leaf. In the fourteenth century it was very highly esteemed for its supposed virtues and was called Way Bread; *e.g.*, an electuary was made with it for those who could not eat; it was also used for diseases of the eye, for wounds, &c.

THE GOOSEFOOT FAMILY.

(*CHENOPODIACEÆ.*)

Goosefoot (Chenopo'dium, *Plin.* sp., Fig. 233).—From Grk. *chēn*, a goose, and *pous*, a foot; from the shape of the leaf. Three, if not more, species of

233. Chenopodium Bonus-Henricus.

234. Suæda maritima.

235. Beta maritima.

236. Salicornia herbacea.

this genus have been used as potherbs or salads, but they are now generally replaced by Spinach, an introduced plant and not a native.

Seablite (Suæ'da marit'ima, Fig. 234).—*Suaed* is the Arabic term for a species yielding soda. This is a seaside plant, and bears fleshy leaves. It is one of the several maritime plants which formerly supplied "Barilla," an impure carbonate of soda, for glass-making. They are now superseded by an article manufactured from sea-salt.

Beet (Be'ta marit'ima, Fig. 235).—So-called from the resemblance of the seed to the Grk. β. This is now the most useful member of the family. It is naturally a perennial, but under cultivation it has become a biennial. It was well known to the Ancients, who cultivated "black and white" varieties, the names referring to the colour of the leaves, as it was only grown for salad or as a potherb. The mid-rib of the white—presumably meaning pale green—was called "Sicula," now spelt "Cycla," and, like the same part of the blanched Artichoke leaves, is called "Chard." Gerarde, in 1597, alludes to the great variety of colours of the foliage produced by seed, observing of it: "With which plant Nature doth seeme to plaie and sport hirselfe; for the seeds taken from that plant which was altogether of one colour and sowen, both bring foorth plants of many and variable colours." These are often now cultivated for ornamental purposes. No use was made of the root, but Gerarde says of it: "What might be made of the red and beautifull roote, I refer unto the curious and cunning Cooke, who no doubt when he hath had the view thereof, and is assured that it is both good and holsome, will make thereof many

237. Salsola Kali.

238 Polygonum Bistorta.

39. Rumex Acetosa.

240. Daphne Mezereum.

and divers dishes both faire and good." At the present day it is the root only which is of value. There are several varieties of the kitchen garden forms, and also of Mangold-wurzel of the farm crops. Besides these it is cultivated abroad for sugar. This is the variety Cycla, which also supplies the Chard.

Marsh Samphire (Salicor'nia herba'cea, Fig. 236).—From Lat. *sal*, salt, and *cornu*, horn; from the form of the stem. Like the last-mentioned, this frequents salt marshes. It is remarkable for its jointed, succulent, and leafless stem. It is sometimes used for pickling, as a substitute for Samphire, and called in consequence Marsh Samphire.

Saltwort (Sal'sola Ka'li, Fig. 237).—*Kali*, Arabic word, as in alkali. This also was used for extracting Barilla. It is easily recognised by its prickly leaves, which are somewhat fleshy at the base, but terminating in a sharp point.

THE PERSICARIA AND DOCK FAMILY.

(*POLYGONACEÆ.*)

Bistort (Polyg'onum, *Diosc.*, Bistor'ta, Fig. 238).—From Grk. *polu*, many, and *gonu*, knee; from the many joints in the stem. Bistort is from the twisted rhizome. Lat. *bis*, twice, *torta*, twisted. This species is not uncommon in moist fields of northern counties, as, *e.g.*, Derbyshire. It is conspicuous for its dense spike of pink flowers. It is this underground stem which is useful on account of the large amount of tannin it possesses, being one of the most astringent of British plants. It also contains starch,

so that after being roasted it has formed a useful article of food in Russia and Siberia in times of scarcity.

Sorrel (Ru'mex, *Plin.*, Aceto'sa, Fig. 239).—The acidity of the leaves of this well-known and common plant is due to the presence of binoxalate of potash. This is really of a poisonous nature, being sold as "Salts of Lemon," useful for removing ink stains (when the ink is made from Oak galls and a salt of iron). In the plant, however, it is not sufficiently strong to be injurious, so that the plant has long been used as a salad plant. Nevertheless, children have suffered from eating the leaves too freely.

THE DAPHNE FAMILY.

(*THYMELACEÆ.*)

Mezereon (Daph'ne, *Diosc.*, Mezer'eum, Fig. 240).—Daphne was the name of a nymph who was changed by the gods into a Bay-tree. *Mezereum* is from Madzaryoun, its Persian name. This is not a very common shrublet wild, but it is often grown in gardens for its pink flowers, which appear before the leaves, and its scarlet berries. The whole plant, as also that of the common Spurge Laurel (D. Laure'ola, Fig. 241), is powerfully irritant. The juice will cause inflammation, and has accordingly been used for blistering. A few berries will even cause death. The bark constitutes a recognised drug in our British Pharmacopœia. It is used externally as an irritant.

THE ELM AND NETTLE FAMILY.
(*URTICACEÆ.*)

Elm (Ul'mus, *Plin.*, monta'na, Fig. 242, Wych; U. campes'tris, Fig. 243, Common).—The former is indigenous, but the latter introduced from the continent. The name "Wych" is from A.S. *wice*, the sense of which is "bending"; in allusion to the pendulous branches characteristic of this species. The foliage was used for fodder for cattle by the Romans, and the trunks for vines to climb. The bark is astringent as it contains tannin, and being mucilaginous it is also demulcent. The great use of the Elm is as timber, especially for its durability under water, hence keels of ships were made of it. The hollowed out stems were formerly used as water-pipes in London and elsewhere.

Stinging Nettle (Urti'ca, Fig. 244).—From Lat. *uro*, to burn, and Grk. *knide*, a nettle. Pliny says it was used in religious festivals as it prevented diseases for a year. He adds that the root makes meat tender. It was much used in the fourteenth century for stanching blood, festering wounds, dropsy, &c. We have three species, the dicœcious (*U. dioi'ca*), the monœcious (*U. u'rens*), and the introduced Roman Nettle (*U. pilulij'era*). The young leaves of the first supply a good substitute for Spinach in early spring, and dried in hay make an excellent fodder. The stems supply a strong fibre, formerly used as a substitute for Flax. The so-called "China Grass" (*Bœhme'ria niv'ea*) is an ally to the Nettle, and makes a very good imitation of linen. Medicinally, Nettle Tea is often used in

241. Daphne Laureola.

243. Ulmus campestris

242. Ulmus montana.

244. Urtica dioica.

the country. It is slightly astringent. In the Middle Ages Nettles were used in various recipes.

Pellitory (Parieta'ria officina'lis, Fig. 245).—From Lat. *paries*, a wall; from this came "perritory," and *r's* were changed to *l's*. It was much used in the Middle Ages in plasters for broken limbs, tightness of the chest, &c.

Hop (Hu'mulus Lu'pulus, Fig. 246).—The suggested etymology of both Latin names is obscure. Hops came from the Netherlands, about 1524. It is somewhat doubtful whether the Hop be a true native, though common enough on our hedges, and was so in the sixteenth century, Before its use a number of herbs with bitter leaves were used, the drink being called ale, throughout the Middle Ages; but when Hops were employed the German word "beer" came into use. The young shoots are sometimes eaten like Asparagus.

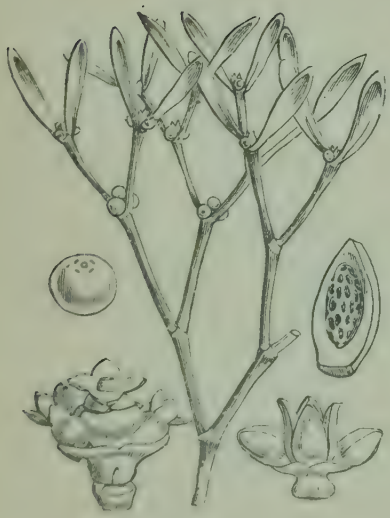
THE MISTLETOE FAMILY.

(*LORANTHACEÆ.*)

Mistletoe (Vis'cum, *Plin.*, al'bum, Fig. 247).—The Lat. name it from the Grk. *ixos*. The English name is derived from A.S. *misteltan;* of which tan is "twig" and mistel from "mist," which in Old Dutch had the sense of birdlime. Hence the word Mistletoe means "birdlime-twig" (Skeat). In the fourteenth century it was spelt Mystyldene, and was also called *Lig'num cru'cis*. The white berries, familiar to all at Christmas, are used for making birdlime. In the fourteenth century there is a recipe for making a lye of the ashes of the

245. Parietaria officinalis.

246. Humulus Lupulus.



247. Viscum album.

248. Euphorbia Lathyris.

Mistletoe growing on the Oak, Quince, and Apple tree. If persons washed their heads with it, it was said to make the hair yellow. The stems and foliage have been given to sheep in winter when fodder was scarce, and they are said to have much relished it.

THE SPURGE FAMILY.

(*EUPHORBIACEÆ.*)

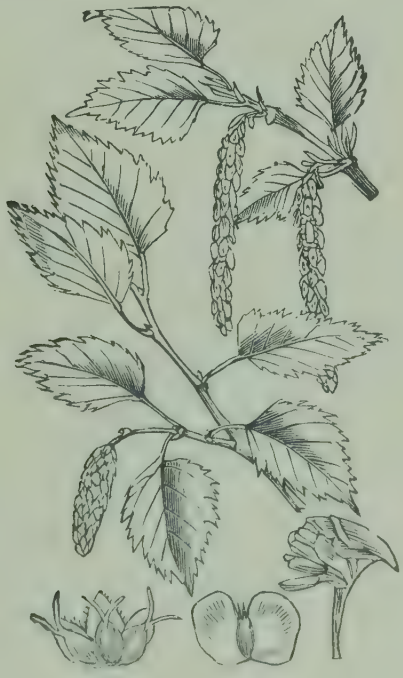
Caper Spurge (Euphor′bia Lath′yris, Fig. 248).—From Euphorbus, Physician to Juba, King of Mauritania. This is a doubtful native, being often naturalised, as it has long been cultivated. It is a South European plant. The name "Caper" is given to it because the unripe fruit, which much resembles that of the garden "Nastur′tium" (*Tropæ′olum ma′jus*) has been pickled in salt and vinegar; but as the milky juice, characteristic of all the Spurges, is poisonous, it is a dangerous plant, and should not be used. The oil of the seeds, like that of Castor Oil and Croton of the same family, is purgative. The milk of the several Spurges of our fields and gardens has the reputation of curing warts.

Box (Bux′us sempervi′rens, Fig. 249).—From Grk. *puxis*, a boxwood box. This is regarded as truly native on Box Hill. As it can be easily clipped, it has been cultivated for "topiary" work from the time of the Romans, the operator being called a "topiarius." It was invented by a friend of Julius Cæsar at the beginning of the first century; and much practised in the reign of Charles II. in England, as it is, indeed, to-day. The wood has a remarkably close grain, so that the annual rings are

249. Buxus sempervirens.

251. Myrica Gale.

250. Mercurialis perennis.



252. Betula alba.

almost imperceptible. Hence it possesses great value for mathematical instruments and for wood engravers. The bark and leaves were used medicinally formerly, while a decoction is said to give an auburn colour to the hair.

Mercury (Mercuria'lis, *Plin.*, peren'nis, Fig. 250).—So called after the god Mercury. This herb, of which the male and female flowers are on separate plants, is very common in thickets, &c. It is very acrid and poisonous. When steeped in water it yields a purple dye, but does not appear to have been used as such. It has proved fatal to sheep, but dried in hay it is a harmless fodder. When boiled it has been eaten as a Spinach. The annual species which has been introduced is equally dangerous. Gerarde writes: "I found it under the dropping of the Bishop's house at Rochester, from whence I brought a plant or two into my garden, since which time I cannot rid my garden from it." It is most abundant in Malta by road-sides.

THE BOG-MYRTLE FAMILY.

(*MYRICACEÆ.*)

Sweet-gale or Bog-Myrtle (Myri'ca, *Theoph.*, Ga'le, Fig. 251).—*Myri'ca* was the Grk. name for Tamarisk. Gale is of doubtful origin; perhaps from Dutch *gagel*, firewood. Gerarde says that "in the isle of Ely they make faggots of it, or 'gaule sheaves,' to burn and heat their ovens." "Sweet" and "Myrtle" refer to the fragrance. The leaves are bitter, and were used as a substitute for hops. Clothes were scented with the leaves, and beds made of the twigs.

THE CUP-BEARING FAMILY.
(*CUPULIFERÆ.*)

Birch (Bet'ula, *Plin.*, al'ba, Fig. 252).—Birch means bark, used for boats; as in Canada, canoes are made of the bark of another species. Pliny says that the birch rods formed the fasces of magistrates, and were objects of terror. The timber of this tree is the chief part of any service, but it is not of first-rate quality. Wheelwrights and makers of agricultural implements employ it. Of course, Birch brooms and school birches are well known. The bark is astringent and used for tanning, imparting the peculiar odour to Russian leather used for binding books. There is a great deal of oil in the bark, so much so that it has often been used for torches in high latitudes; and, as it contains farinaceous matter, the bark has been ground and the powder mixed with flour in times of scarcity. The sap is sometimes tapped for its sugar, as it contains a small quantity, about 2 per cent.

Alder (Al'nus, *Plin.*, glutino'sa, Fig. 253).—The derivation of *Al'nus* is obscure. The wood is well adapted for piles under water, as it becomes hard and durable. Hence it was formerly employed for water-pipes. It is used in turnery and cabinet-making, as well as bowls, kneading troughs, &c. The charcoal makes a good gunpowder. In the Highlands a black colour for yarns is obtained by boiling the bark with copperas. In Russia deer- and dog-skins are dyed with it. As the bark is very astringent, it has been used medicinally in intermittent fevers, &c.

Oak (Quer'cus, *Plin.*, Ro'bur, Fig. 254).—*Ro'bur* was the name for a particular kind of oak mentioned by Pliny. Oak is from the A.S. *ac*; it is akin to "egg" from the shape. Pliny tells us that the civic crown was the most glorious reward that could be bestowed on military valour. It was an emblem of imperial clemency, as shown by a crown of oak-leaves suspended before the palace of the Emperors. Julius Cæsar received one. He adds that he knows of thirteen varieties, that the acorns were eaten dried and ground as bread, also roasted. The two varieties (*Q. R. pedunculata* and *Q. R. sessiliflora*) are too well known to need description. The wood for timber and the bark for tanning, as well as the acorns for pigs, have been used for ages. The fine avenues of Oaks in and near Cape Town were first planted by the Dutch for the sake of the acorns. In "Domesday Book" the ancient Oak forests were described as being of so many "hogs," *i.e.*, capable of supplying acorns. The soft "Oak apples," as well as the hard galls, appear to have been used in the Middle Ages for making ink. Ink with wine was an antidote for adder's poison. Also, ink, honey, and the white of an egg was used for sore eyes. The "bog Oak" of Ireland is stained black with tannate of iron, the same thing as ink.

Beech (Fa'gus, *Plin.*, sylvat'ica, Fig. 255).—Beech is from A.S. *boc*, signifying "book" and a beech tree, Runic tablets being made of it. The fruit was an article of food with the Ancients. This familiar tree has a close-grained wood, but is not much used as timber, because changes from drought to moisture tend to its decay rather rapidly; but for furniture, screws, &c., and other work of coopers and turners,

253. Alnus glutinosa.

254. Quercus Robur.

255. Fagus sylvatica.

256. Corylus Avellana.

much use is made of it. It is remarkable for its great durability under water, hence its applicability for piles. In France sabots are made of it. After being soaked in water and then subjected to smoke it has proved durable as planks. On the Continent charcoal is made from it. The fruit or "mast" contains oil, starch, sugar, &c., and is much eaten by oxen, swine, and poultry. Nevertheless, if consumed too largely by man, it has proved injurious. Horses in Germany eating the husks as well as the kernels have been poisoned by them, as it is the skins which principally contain the injurious principle. Beech oil is as useful for all purposes to which olive oil is usually put.

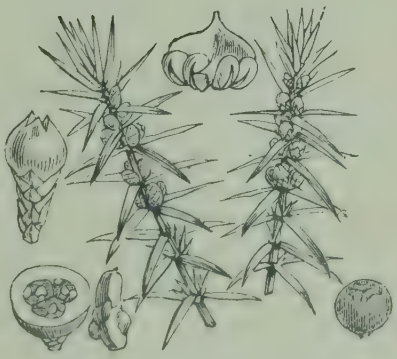
Hazel (Cor'ylus, *Plin.*, Avella'na, Fig. 256).—From Abellinum in Campania, now called Avellino, where Hazel-nuts of a particular variety still abound. *Cor'ylus* and Hazel refer to the staff used for driving cattle, from A.S. *hæs*, a behest or order, the stick being used to enforce orders. So Lat. *cor'ylus* is connected with Grk. *koi'ranos*, a commander. The cultivated large-fruited varieties, known as Filberts and Cobs, are all derived from our wild plant with small fruit. The sap from the green Hazel oozing out of shoots put on a fire, together with the juice of the House-leek and honey, was put into the ear to cure deafness, while the burnt bark powdered was blown into the nostrils to stop them bleeding, in the Middle Ages. The straight shoots of the underwood are useful for walking sticks, crates, hurdles ,and cask-hoops. Burnt, they supply artists' charcoal, while knotted roots are used for veneering.

Hornbeam (Carpi'nus, *Plin.*; Bet'ulus, Fig. 257).—*Bet'ulus*, *i.e.*, as if it were a kind of Birch Hornbeam, *i.e.*,

257. Carpinus Betulus.

259. Pinus sylvestris.

258. Salix viminalis.



260. Juniperus communis.

"horntree," perhaps, referring to the horn-like bracts which envelop the fruits. This tree is especially abundant in Hertfordshire and some other counties. It has a wood suitable for agricultural implements, mill-work, &c. It used to be employed for the "beams" or yokes placed under the horns of cattle, hence the name was supposed to be derived from that fact. The bark yields a yellow dye, which is used in Sweden.

THE WILLOW FAMILY.

(*SALICACEÆ.*)

Willow, Osier (Sa'lix, *Plin.*, vimina'lis and sp., Fig. 258).—Osier is from a Celtic word for water or ooze. Pliny refers to several uses, *e.g.*, as supports for vines, the bark as withes, the short for wicker-work, panniers, chairs, &c. Trees were pollarded by the Ancients as now. Cato regarded the Willow in the third rank of useful trees. Several species, varieties or hybrids, for many of the last are wild, are grown for the long annual shoots. The different degrees of slenderness or otherwise renders them useful for various kinds of basket-work, hampers, &c. In some, as Rose Willow (*S. Hel'ix*), there is a considerable amount of the substance salicin, which is used medicinally, having analogous properties to those of Cinchona Bark for fevers. The Willows grown for their branches are *S. al'ba*, *S. ciner'ea*, and *S. frag'ilis*. These are converted into "pollards," the shoots being cut every five or six years, when they are sufficiently large for fences, casks, poles, &c. The bark of Willows contains a considerable amount of tannin, and is useful for making leather.

PINE FAMILY.

(*CONIFERÆ.*)

There are only three trees or shrubs belonging to this group of "cone-bearers," as the name implies, in Great Britain—the Scotch Fir, the Juniper, and the Yew.

The Scotch Fir (Pi'nus, *Plin.*, sylves'tris, Fig. 259).—Fir is from Dan. *fyrr*, the *fire*-tree, being very inflammable. It is found truly wild in a comparatively few places from York to Sutherland, but where planted it multiplies itself by seed. It can attain a height of 100 feet, with a trunk 4 feet to 5 feet in diameter. It is valuable for its timber. Some hundred years ago a Scotch forest supplied sufficient for forty-one ships. It is said that the best masts and spars are constructed from this Pine. The timber is imported from Norway under the name of Red Deal. The use of the smaller branches, &c., is for making tar and pitch. For this purpose they are burnt in an enclosure of earth, covered with turf. Slow combustion thus occurs, and tar is drawn off by a pipe thrust into the base of the mound. The more solid residue is pitch. Turpentine is obtained by removing the bark, when the juice exudes and coagulates. This is distilled, the essential oil being called spirits of turpentine, resin being the solid substance left. The Scotch formerly used the roots as candles, as they are rich in resinous matters.

Juniper (Junip'erus, *Plin.*, commu'nis, Fig. 260).—This grows in the form of small bushes on the Downs of Sussex but is much larger or even small

trees 10 feet to 12 feet high from Yorkshire to Shetland, assuming a dwarf form (*na'na*) on the mountains of North Wales, Westmorland to Shetland, ascending to 2700 feet. The wood of this species is not of much use, only being employed for small articles. The berries are the principal commodity, collected for their essential oil. They are included in the British Pharmacopœia, as the "oil of Juniper" is regarded as a local stimulant. It is also used for flavouring gin. The origin of the word "gin" is peculiar. It is short for *geneva*, a corruption of the French *genevra* from the Latin *Junip'erus*, which means "youth-producing" from its evergreen character.

Yew (Tax'us, *Plin.*, bacca'ta, Fig. 261).—*Taxus* is probably from Grk. *toxon*, a bow, made from the wood. Yew is apparently of Celtic origin. Pliny speaks of the sombre and ominous aspect of the Yew; and that vessels for wine made of the wood caused death. It was long thought that if people slept under a Yew they would die. A superstition was that the poison would be quite neutralised by driving a copper nail into the wood of the tree! This is a familiar tree nearly all over England and Scotland. A fastigiate or erect variety, with the leaves spreading instead of lying horizontally, was discovered in Ireland. From this source all the Irish Yews of this form have been propagated. The Yew seems able to live longer than most, if not all, trees. They grow very slowly after the first half century—about one-twelfth of an inch annually, but trunks of ancient trees are recorded as being upwards of 80 feet in girth. Those at Fountains Abbey are said to have been there in the early part of the

261. Taxus baccata.

263. Iris Pseud-acorus.

262. Orchis mascula.

264. Ruscus aculeatus.

twelfth century. The wood is of a yellow-orange tint, and very durable. Some wood brought from the palaces of Nineveh, and recorded on a tablet there discovered as having been sent as "Cedar" from Lebanon, proved on a microscopical examination to be Yew, and possibly what was called "Algum" or "Almug." The wood appears to have been one used for the statues of the gods by the Ancients, on account of its durability and hardness. The most famous use of the wood was for bows in the Middle Ages. The leaves and seed (but *not* the scarlet cup, in which the seed lies) are poisonous to cattle, and the latter to children, who are especially liable to eat it with the sweet cup.

THE ORCHID FAMILY.

(*ORCHIDEÆ.*)

Orchis (Or'chis, *Theoph.*, mas'cula, Morio, &c., Fig. 262).—The tuberous roots of species of Orchis have long been used, especially in the East, for making a drink called salep, or saloop, in England, a word made from the Arabic Sahlep. It used to be sold at stalls in the streets of London before coffee supplanted it. The nourishment consists of a substance called bassorine, which replaces starch, the usual reserve food material in tubers, &c. It is said that the best English salep came from Oxfordshire, but the roots were chiefly imported from the Levant.

265. Asparagus officinalis.

266. Polygonatum multiflorum.

267. Allium vineale.

268. Allium Scorodoprasum.

THE IRIS FAMILY.

(*IRIDEÆ.*)

YELLOW FLAG (I'ris, *Theoph.*, Pseud-a'corus, Fig. 263).—This flower is the Fleure-de-Lis, adopted, it is said, by Louis VII. of France as the national bearings. The name is from the River Lys on the borders of Flanders. It was called gladyne in the fourteenth century and was an ingredient in an antidote to poison; and the leaf with honey was a cure for the toothache. The seeds are said to form a good substitute for coffee.

THE LILY FAMILY.

(*LILIACEÆ.*)

BUTCHER'S BROOM (Rus'cus, *Virgil*, aculea'tus, Fig. 264).—So called "because butchers used to make brooms of it to sweep their blocks." This is denied; for by referring to German and Italian descriptions, it was "because of its use to preserve meat, by covering it, from mice and rats." In Italian it is called *Pongitopo*, prick-mouse.

In Greece the young shoots were eaten like asparagus. In Corsica the red berries were roasted and used as coffee. The boughs have been used by London cigar manufacturers for sprinkling a saline liquor over the tobacco leaves.

ASPARAGUS (Aspar'agus, *Diosc.*, officina'lis, Fig. 265).—The name is derived from Grk. *sparasso*, to tear, because the common South European species is spiny. It was much cultivated by the Romans. They used to fire the dead stems. It had twenty-

269. Allium Schœnoprasum.

270. Allium oleraceum.

271. Allium ursinum.

272. Ornithogalum umbellatum.

four supposed remedies. It was thought if one was rubbed with Asparagus beaten up with oil he would not be stung by bees. This is an inhabitant of salt marshes and sandy shores of Wales, Cornwall, and Dorset, but is rare. The stems are quite edible wild; the cultivated form is the result of high nourishment.

Solomon's Seal (Polygona'tum, *Diosc.*, multiflo'rum, Fig. 266).—The English name is from the flat, round scars on the rootstock. The leaves made into a paste were useful for bruises. Gerarde (1597) observes that "it would remove in one or two nights any bruise, black or blue spots gotten by falls, or woman's wilfulness in stumbling on their hasty husbands' fists!" The young shoots can be eaten like asparagus, and are said to be much relished in Turkey.

Crow Garlic (Al'lium, *Plautus*, vinea'le, Fig. 267).—Garlic is from A.S. *gar*, a spear, and *leac*, leek. It is found in dry pastures, but not frequently. The head produces bulbils, and the leaves are sometimes used, like those of the Chives.

Rocambole or Sand Leek (Al'lium Scorodopra'sum, *Diosc.*, Fig. 268).—A rare plant in dry pastures, occurring in North England and Scotland. It has long been cultivated, and produces bulbils in the head, as well as cloves to the bulb like the Garlic. Both are used for flavouring or pickles, &c.

Chive (Al'lium Schœnopra'sum, Fig. 269), *i.e.*, Rush-leek; from the form of the leaves.—Chives is from Fr. *cives*, derived from Lat. *cepa*, Onion. A very rare plant, occurring in rocky pastures in Northumberland, Lancashire, Brecon, and Cornwall. Though the Chive is the smallest of the Onion tribe,

it is said to be the finest flavoured. When cultivated it is the leaf-tops which are cut and used for flavouring or salads. It may be continuously cut, the bed lasting three or four years.

Field Garlic (Al'lium olera'ceum, Fig. 270).—This is a rare plant, occurring on the borders of fields in Devonshire, Somerset, and Gloucestershire. It is one of the "Onions" which bear bulbils in the head of flowers. It is the leaves which are used for flavouring stews, &c.

Ramsons (Al'lium ursi'num, Fig. 271).—Ramsons is from A.S. *hramsa*, rank, from the strong odour. This was formerly eaten as the old couplet says:

> "Eat Leeks in Lide, and Ramsons in May,
> And all the year after physicians may play."

"Lide" was the month of March.

Star of Bethlehem (Ornithog'alum, *Diosc.*, umbella'tum, Fig. 272).—A word meaning "bird-milk." The English name is from the white star-like blossom. The bulbs are said to be very nutritious when boiled.

Spiked Ornithogalum (O. pyrena'icum, Fig. 273).—A local plant, in a few counties. The unexpanded inflorescence is collected and sold in Bath under the name "French Asparagus." They are very insipid.

Meadow Saffron (Col'chicum, *Diosc.*, autumna'le, Fig. 274).—From Colchis, where it is said to have been first found and its virtues discovered. This is not a rare plant in many parts of England, growing in meadows and low-lying pastures. The corm has long been used in medicine, though very poisonous. It is considered of great value for gout and rheumatism.

THE RUSH FAMILY.
(*JUNCEÆ.*)

Soft Rush (Jun'cus, *Plin.*, effu'sus, Fig. 275).—From the Lat. *jungo*, to join; from their use for tying. Rush is perhaps derived from *rus'cus*, Butcher's Broom (Skeat). Pliny describes several plants under the name of Rush; but alludes to the use of the pith of the present one, probably for wicks of lamps. It was still used for rush-lights in the earlier half of the last century. In the sixteenth century rushes were used in lieu of carpets by the rich; and Cardinal Wolsey was accused of extravagance for having fresh rushes strewed once a week, when even the King did not have them so frequently. They are still used for mats.

THE REED-MACE FAMILY.
(*TYPHACEÆ.*)

Reed-mace or Bulrush, &c. (Ty'pha, *Theoph.*, latifo'lia, Fig. 276.—From Grk. *tuphos*, a pool. Bulrush was formerly *pole-rush* or pool-rush; and has been applied to a Sedge (*Scir'pus lacus'tris*) as well as *Ty'pha*. The chief use of this plant is for making casks watertight by the leaves being placed between the staves. The pollen, being very inflammable, has been used instead of Lycopo'dium spores, for flashing lights of fireworks.

273. Ornithogalum pyrenaicum.

274. Colchicum autumnale.

275. Juncus effusus.

276. Typha latifolia.

THE CUCKOO-PINT FAMILY.

(*ARACEÆ.*)

Lords and Ladies (A′rum, *Diosc.*, macula′tum, Fig. 277).—This has a tuberous stem, which is very acrid and poisonous; but contains much starch. They were formerly collected in the Isle of Portland, and the starch extracted was sold as Portland sago.

Sweet-flag (A′corus, *Diosc.*, Cal′amus, Fig. 278).—Grk. *kal′amos*, a reed. This plant is very aromatic and has an agreeable scent. It is thought to have been the "Sweet cane" of Scripture. The rhizome has been employed as a stimulant and tonic. It was supposed to be a remedy for ague in Norfolk. On the Continent, when candied, it is eaten as a sweetmeat. It is an ingredient in tooth-powders. A medicine containing Gentian and Calamus was called Stockton Bitter. The leaves, which are also aromatic, used to be strewn in churches, and in Norwich Cathedral on festivals.

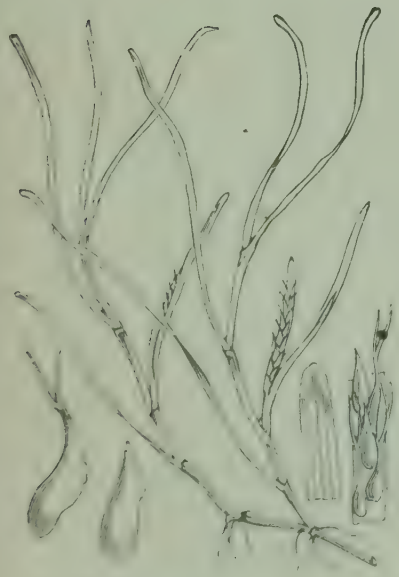
THE PONDWEED FAMILY.

(*NAIADACEÆ.*)

Grasswrack (Zoste′ra mari′na, Fig. 279).—From Grk. *zōstēr*, a girdle; which the leaves resemble. The long grass-like leaves of this marine plant are tough and flexible when dry, and are used for stuffing mattresses, cushions, &c. It is also useful for packing glass and china articles. In some places they are used like the sea-wrack (*Fu′cus*) for manure.

277. Arum maculatum.

278. Acorus Calamus.



279. Zostera marina.

280. Scirpus lacustris.

THE SEDGE FAMILY.

(*CYPERACEÆ.*)

Bulrush or Great Club-rush (Scir'pus, *Plautus*, lacus'tris, Fig. 280).—Though called a rush, this is really a Sedge. It grows in ponds and lakes, throwing up tall round stems 6 feet or 8 feet in height. These are used for "rush"-bottomed chairs, mats, hassocks, and in some places for thatching. The principal use is to render casks water-tight by placing them between the staves. The roots, being astringent, were once regarded as of medicinal use.

Cotton-sedge (Erioph'orum, *Theoph.*, polysta'chion, Fig. 281).—From Grk. *er'ion*, wool, and *pher'o*, to carry. Pliny alludes to the use of the silky hairs for stuffing pillows. These long silky hairs surround the fruits, and are still used for stuffing cushions. It has been woven, but the hairs are too brittle, so do not stand being twisted. Wicks are made of it by country folk.

Sea Sedge (Ca'rex, *Virgil*, arena'ria, Fig. 282).—This is planted on the dykes in Holland for the purpose of binding the sand by means of its long and interlacing underground stems. These have been used medicinally in Germany under the name *German Sarsaparilla.*

THE GRASS FAMILY.

(*GRAMINEÆ.*)

Grasses.—Many genera and species form meadow hay, which need not be here enumerated, four of

281. Eriophorum polystachion.

282. Carex arenaria.

283. Anthoxanthum odoratum.

284. Ammophila arundinacea.

which are illustrated; but the following Grasses have certain specialities.

Sweet-scented Vernal Grass (Anthoxan'thum odora'tum, Fig. 283).—Meaning yellow-flowered. This imparts the peculiar scent to fresh hay; it has the same principle as occurs in the Tonquin Bean and Woodruff. It is a short Grass, not affording much fodder in itself.

Marram or Mat-grass (Ammoph'ila arundina'cea, Fig. 284), *i.e.*, sand-loving.—Grk *ammos*, sand. Mat is from its dense mat-like tufts. Marram is from Dan. Marhalm—sea-haulm or straw. This is a common, coarse-growing, maritime Grass on our sea-shores. Its underground creeping stems are valuable in binding the sand together and preventing its being blown away. It has saved thousands of acres of land. The creeping stems, sometimes 30 feet in length, are made into ropes by seaside dwellers, as well as mats, which have given the name to the Grass.

Reed (Phragmi'tes commu'nis, Fig. 285).—From Grk. for "material for enclosure," thatching, fences, &c. Reed is from Lat. *Aru(n)do* by loss of *n*. This well-known and tallest of our native Grasses frequents rivers, lakes, and marshes, bearing long, feather-like, purplish panicles with silky hairs, imparting a silvery lustre to them. The stems are used for thatching, being superior to straw. Mats are also made of it, as well as numerous other purposes in fen countries. Pens were originally made of reeds, and, as a fine point was impossible, it accounts for the black-letter type made in imitation of the fourteenth-century handwriting.

Annual Meadow Grass (Po'a, *Theoph.*, an'nua.

285. Phragmites communis.

287. Lolium temulentum.

286. Poa annua.

288. Agropyrum repens.

Fig. 286).—Poa is Greek for grass. Perennial species of this genus are valuable fodder Grasses; but this annual one is too small to find a home among the usual meadow Grasses; but for such places as the London parks it is invaluable. It seeds profusely, and drives out other plants, so that a constantly-cut lawn may be entirely composed of it, provided it be moist, for it does not succeed in very dry soils. It becomes a perennial under the former conditions.

Darnel (Lo'lium, *Plin.*, temulen'tum, Fig. 287). —Darnel is from an old Fr. word, *darne*, stupified, from its supposed intoxicating qualities. It was also called *cokil* and *ray*. In the fourteenth century it was used against "festour and morsowe." "Cokkil-meal" was thought good for freckles, and to make the face white and soft. It is described as the only poisonous grain among grasses; but as the use in the sixteenth century was similar to that of ergot, a diseased condition of the grain of rye, it is more probable that the injurious nature of Darnel was due to an "ergotised" condition.

Couch or Quich Grass (Agropy'rum (Trit'icum) re'pens, Fig. 288).—According to Pliny, from *tritus*, robbed, *i.e.*, the grain from the ear, *T. vulga're* being wheat. Couch appears to be from A.S. *cwice*, vivacious; on account of its tenacity of life. This most troublesome of Grasses on arable land, in consequence of its creeping rhizome or underground stem, becomes a valuable plant in its varieties which frequent sandy shores, for they help, with Mat-Grass and others, to bind the sand-dunes and prevent their shifting. On the Continent the creeping stems are collected and sold for fodder, as they contain a good deal of starch, sugar, and mucilage.

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